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AMSTRAD ACTION

ISSUE No. 107
AUGUST 1994
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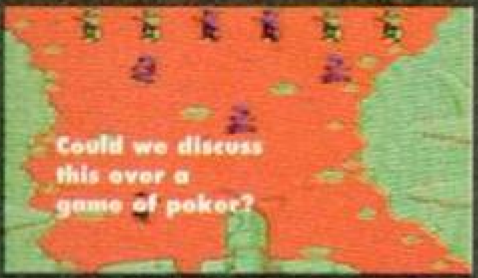
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AMSTRAD ACTION
AUGUST
ISSUE 107

Line-up

Check out what's on this month's covertape...


Could we discuss this over a game of poker?

Ikari Warriors
Live out your very own Arnie Schwarzburger/ Sly Stallone war movie with the help of this stormingly brilliant shoot-'em-up. Lights, cameras, action... er, or should that be... big guns, big tanks, BIG action?



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Turn to page 10 for all the details.

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Reaction

Send your letters to: Reaction, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW

Dear AA

Hairy problem

I've been reading *AA* since issue 71 and have seen a lot of changes in that time (mostly for the better) but recently I've had a couple of gripes (sounds painful) and questions.

1 Clur. Who is she? Where did she come from? Where did she go to so suddenly? How come there were never any clear photos of her?

2 Back issues. Why are we expected to pay £2.50 for issue 66 when it would have cost around £1.65 when it first came out? This has put me right off ordering it.

3 Simon's hair. When did he first grow it long? Was he teased about having it long at school as I am about mine? How long does your hair have to grow before you can become a staff writer? Mine is shoulder length. Will that do?

4 Small ads. Who the smeg puts them together? I sold my MP-3 no trouble, but not my cartridge game. I was asking for a fiver, but the ad was asking for £650. I want compensation (£20 cash).

5 Reviews. Now there aren't any commercial games to review these days how about re-reviewing some of the games you can still get (from places like Wizard). By reviews I mean full reviews, not short paragraph reviews like in the Good, Bad and Dave, er, Ugly features. This could also be extended to hardware reviews. You could start with the Rombo Digitiser. Alternatively, you could pass them onto me for review. I charge very good rates.

6 Could you put a screen dump program on the covertape? Vorsprung durch viva the CPC as they say (who are 'they' and why should we listen to them?)
Tim Hughes, Cannock.

1 Clur was a cynical marketing attempt to appeal to a pubescent, male, teen audience and never actually existed (psst – actually, that's not true, but she's working on something hush, hush for the MOD but we're not allowed to tell you that because her identity needs to remain secret – so we didn't tell you, okay?).
2 Er, that does seem a bit unfair, which is why we revamped the Back Issues service.
3 Simon only started growing his hair long after he left school because he was too much of a jessie to face up to the (well-deserved) ridicule. And it actually helps not to have long hair if you want to be a staff writer, otherwise it gets caught in your typewriter all the time. Anyway, Simon's talking about shaving it all off. And it's about time too.
4 £20 refund? When you've just effectively had a second free ad published for absolutely nothing? You must be joking.
5 A classic game review section is a distinct possibility, though not quite in the form you mention, but even better.
6 There's a screen dump program on the covertape this very issue. How's that for speed of service? **Dave**

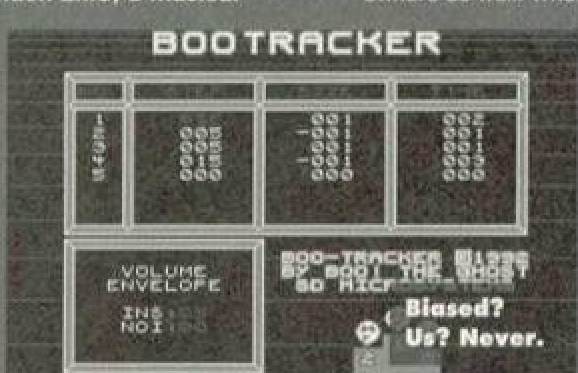
Dear AA

Hypocrites

I would like to point out a few things about the magazine, so I hope you like long letters.

1 Why are you always contradicting yourselves? I read in *AA*105 that you weren't going to put a WIMP package on the covertape because not everyone can use it. I then read you were going to put a mini version of Fluff on the covertape which only Plus owners will be able to use.

2 Why don't you mention *EMU*, a musical package from Discovery, in the magazine? You mention everything but. In my view this is one of the best soundtrackers ever programmed. It can do everything that you said *Music Maker* could. I suggest you do a soundtracker round-up (no bias towards *BooTracker*, Simon).



Biased? Us? Never.

3 I was thinking (that makes a change) and I thought of a good way to settle the long-running battle over putting type-ins on the tape. Next month, say, you could cover one side of the tape with the best type-in of every month since you started the *Classic Collection* (in issue 91 – Dave). This would hopefully shut up all the people who moan about you having taken type-ins off the tape (they're entitled to their opinion but recently it's been getting ridiculous). Hopefully, people who don't like having type-ins on the tape would put up with it if it was only done once a year.

4 Your new tape boxes are absolutely crap. They don't even fit into a tape storage unit.

5 I think that most of your covertape software has been excellent so far so keep up the good work.

Apart from these few points the magazine is excellent.
Mark Tennant, Berwickshire.

1 Guilty. Sorry about that. The only defence I have is that when we do get around to putting the Fluff level on the tape we will make sure that there is a game for non-Plus owners as well. When we were thinking about the WIMP system it looked like that would be the only the serious package that would fit on. But that could all change...
2 Consider *EMU* well and truly mentioned (er, by your good self, admittedly). The round-up of soundtracker packages is a truly excellent idea... one that I had already thought of, of course... ahem.
3 I'm sorry, but that still seems to defeat the object of type-ins to me. But, as I always say in these cases, if enough people write in to support the idea, I am willing to be proved wrong.
4 If cardboard tape boxes are good enough for *Vox* and *Select* they're good enough for us. Besides, they're more environmentally friendly. Oh yeah, and cheaper.
5 When you say most of the covertape software, I take it that *Rick The Roadie*'s not included. **Dave**

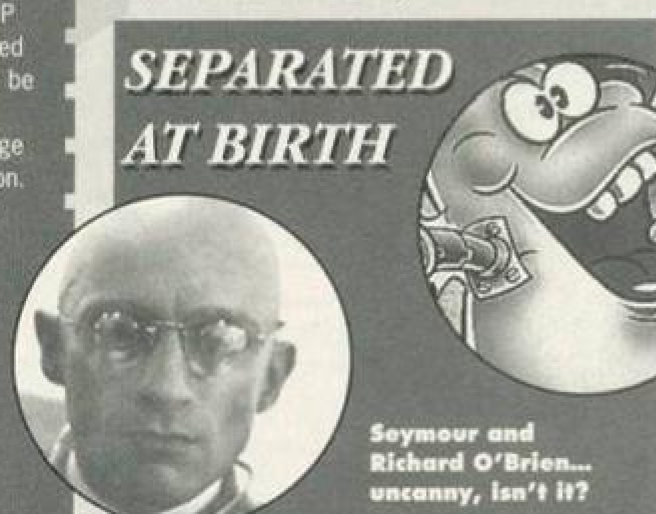
Dear AA

Mr Potato Head

1 Please put a role-playing game on the covertape along with a footy game.

2 How about putting POKEs on the covertape again?

3 I think Separated At Birth should feature Seymour or Dizzy with Richard O'Brien and The Wizard Zaks with Jeremy Beadle.



Seymour and Richard O'Brien... uncanny, isn't it?

4 Is it true that you can use a Sega Master System 2 joypad with the Amstrad 464? Can you use an Amstrad joypad with the Sega Master System?

5 I think that *Nebulus* is a cross between a frog and a mouldy cabbage and would make a very good football.

I hope your mag goes on forever.
Lee Cleary, Maltby.

1 There will definitely be a role-playing game on the tape soon (we are in negotiations to

Short Sharp Shocks

● **I tried hard for years to get *Chuckie Egg* and finally managed to get it at a shop in Margate in Kent.**
Spencer Wilson, Co Galway, Eire.

I knew there had to be some reason for Margate's existence. **Dave**

● **I would like to know if you have got *Ball Bearing*. If so, send it to me.**
Richard Peary, Somewhere.

Yes and no. **Dave**

● **Send me some Basic programs so that I can type them into my Amstrad.**
Richard Peary, Somewhere.

Don't you ever stop trying? We're not a charity mail order company, you know. Make do with the ones we print in Type-Ins like everybody else. **Dave**

● **Bring back the covertape boxes.**
Gordon Menzies, Shotts.

Well, we'd like to, but we don't think you'd like the price rise in the mag that move would entail. **Dave**

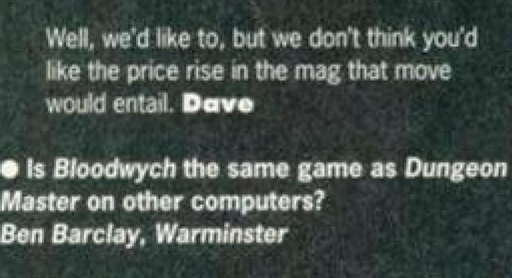
● **Is *Bloodwych* the same game as *Dungeon Master* on other computers?**
Ben Barclay, Warminster

Yes. **Dave**

● **How many different *Dizzy* games have there been on the CPC?**
Shelley Keel, Maidstone

Hands up everybody who expects me to say, 'Too many.' Hah, wrong! Do you think I'm that transparent? There are, in fact, 12 *Dizzy* games; seven adventures and five arcade games. **Dave**

● **I think the CPC is like a VW Beetle. Amstrad might have stopped producing it, but I bet there's some South American company that'll keep on manufacturing it.**
Kevin Clarke, Jacob's Ladder



South America now churns out Beetles, but are they interested in CPCs?

Have you ever driven in a Mexican Beetle? If the Mexican's produced CPCs Richard's Techy Forum would be drowned with letters about incompatibility problems. **Dave**

procure one of the all-time greats at the moment) but there are currently no plans for a footy game (we don't want to jump on this World Cup Bandwagon).
2 Blimey, you lot are so lazy. Exercise those digits! Get into the work ethic.
3 Separated At Birth was one of the features that fell victim to the new truncated issue sizes, but for one month only, it makes a comeback.
4 Yes. On both counts. Why?
5 Since when have you seen a frog/cabbage hybrid used in international soccer? There would be green gunge everywhere and the RSPCA would be up in arms. **Dave**

Cassettes versus content

The first issue of *AA* I bought was no 68. I'd had my CPC for about five years and hadn't really touched it apart from playing *Roland On The Ropes* every now and then. But thanks to *AA* I've used it for a lot more. I now have over 100 programs, mostly games, which I would probably never have brought otherwise. I now have a PC as well but I still often use the CPC.

I used to get *AA* purely for the covertapes, but now (I have to say that their quality has gone down) each covertape gets loaded about two or three times and instead I read the actual magazine completely, every word. The actual contents of the magazine is much better now. Well done.
Stephen Holdsworth
PS Why get rid of the Balrog? It was much better than the current adventure column.
PPS Great mag – keep up the good work.

Amazing. Someone who has discovered there's actually a magazine stuck to the back of his monthly covertape. Somebody who looks beyond the surface, who has realised that superficial beauty is, indeed, only skin deep and who has found that the real beauty of the



Have you got the blues bug? And we don't mean do you like Blind Melon...

£69.25

I have been reading the mag since *AA*81 and I must say that *AA* has to be the best. Even if all my issues together come to £69.25 *AA* is worth it.
1 I have a game called *Silkworm* by Mastertronic. Whose company is that? Have you reviewed the game? I think it would score 94 per cent. The graphics and sound are absolutely brilliant.
2 Please put these on the covertape: *Commando* (Elite), *Ikari Warriors* (Elite), *Night Hunter* (Ubisoft). I reckon that everybody likes them.
3 People should stop moaning about *AA*.
4 My top 10 games are:
1 *Silkworm*
2 *Uridium*
3 *Lotus Esprit Turbo Challenge*
4 *Cybernoid 2*
5 *Exolon*
6 *Bubble Bobble*
7 *HeroQuest*
8 *RoboCop*
9 *Chase HQ*
10 *Mystical*
5 Why has *AA* dropped to 50 pages at £2.95 when it used to be 58 pages at £2.95? What is going on?
6 Please put PD games on the covertape.
7 Why did the *Blues Brothers* on *AA*98 have a fault? I think we should have a bit of money back for that.
8 Nebulus is a mix between a dog and a cabbage.
9 Why did Clur leave?
10 Any plans for making a game involving the *AA* crew?
11 Simon is brilliant. He is a man with a great talent.
Ben Speake, Stype
PS Keep up the good work.
PPS CPC stands for Clur prefers chocolate.
PPPS Please print this letter. Thank you.

1 It got 72 per cent in issue 50. Personally I agree with you and think that this is a criminally low mark. Mastertronic was part of Virgin, by the way.
2 Well, we've managed to get *Ikari Warriors* for you. Great minds think alike, eh?
3 But if they didn't moan we'd never know how to improve the magazine. Some people have genuine points.
4 It's good to see how many covertape programs are on that list.
5 It's an unfortunate economic fact. We have to cut costs otherwise the magazine would have to close. If you anyone feels that £2.95 is too much to pay for the magazine as it is at the moment, that's fair enough, and they don't have to buy the magazine; but we hope that for the majority of readers the quality of what we provide every month is more important than the quantity. Anyway, if you subscribe the cost goes down to the equivalent of just £2 an issue.
6 Okay.
7 The original had a fault, unfortunately. But it wasn't debilitating – you should still be able to complete the game.
8 So the popular opinion this month is that there's definitely a trace of cabbage in there somewhere.
9 That is top secret information.
10 Er, no, frankly. There isn't enough room in memory to cope with a Hairy Happening sprite.
11 Oh no, the great lazy lump'll be asking for a raise now. **Dave**

Poached

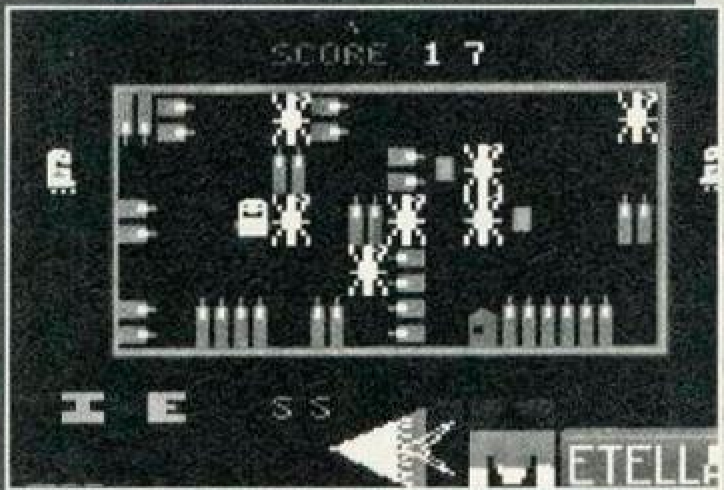
This is a complaint letter, and with just cause, too. Remember *Caecilia Metella*? You gave it 76 per cent in *AA*105 and said of it: "It's one of the better ideas we've seen for a puzzle game lately."

Yes, I thought that it was a good idea when I first saw it being used in *Kwik Snax Dizzy* as a bonus level. With the small addition of the spikes, these two games appear identical.

However, *Kwik Snax* is a professional production; it has more levels, better graphics, professional music, a better name (*Caecilia Metella* sounds like it was taken from a Cambridge Latin Course), etc. Surely it should have a higher score than *CM*?

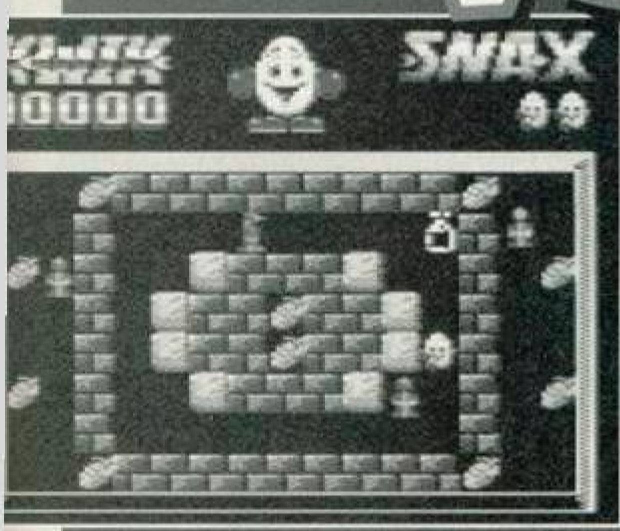
Nope. 76 per cent. Exactly the same. Does this indicate some racial bias against eggs? Maybe if you tried looking at *Dizzy* games instead of criticising them, you would have noticed this resemblance.

Annoyed Reader, Liverpool.



A bonus level from *Kwik Snax Dizzy*... er... we think, anyway...

VS



***Caecilia Metella* – that PD classic. Or is it? Y'know, I could have sworn that I've seen screenshots like this before...**

There is one big difference between the two games – *Caecilia Metella* is free, and that has to be taken into account. And come on, *Kwik Snax* is hardly the most original game; it's virtually a rip-off of Pengo. Sure *CM* might not be up the graphical standards of *Kwik Snax* but Keith reckons that its playability is just as good, and that's the most important thing, surely. **Dave**

magazine lies beyond the covertape. Stephen, *Amstrad Action* salutes you. **Dave**

PS Actually, there will be a revamp of the adventures pages which'll make them (notice the plurals) the best they've ever been.

PPS We intend to do our best but you can help out. Check out my editorial column on page eight and the new subscriptions service on page nine for more details.

Unreliable

I read with great interest the article about PD libraries in *AA*104, so, being a member of the 'over the hill' gang and new to the CPC scene, this seemed worth looking into. So I selected two libraries to write to.

The ones I chose from the Amscene Directory were Colrob PD and Dartsma. Being impatient to find out what these people could offer I wrote to them first class post enclosing a note requesting their list of titles and charges; I also enclosed a first class stamped addressed envelope. This was approximately four to five weeks ago, and I am still waiting for a reply from both libraries.

Adam Shade states in your article that public domain libraries should have certain standards because currently there are too many are starting up which do not return people's discs or other things (I wonder if this includes the enquiry I sent to him).

Not getting replies from these libraries has made me hesitant about contacting others. If this is what's happening to the PD scene, you might as well start saying its last rites now.

W Gilhespy, Aylesbury.

I agree with you. It is intensely annoying that the public domain is failing to fulfil its potential. We have tried our best to promote it, to make all our readers aware of what it has to offer, but if newcomers, like yourself, are dissatisfied with the way they're treated, then the public domain will never grow into the thriving scene it could be.

AA tried a scheme whereby all the PD we reviewed would be made available in all the libraries listed in the Amscene Directory (previously, when we had listed specific libraries, other libraries complained of bias). The response was poor, mainly because it was viewed as an attempt by us to 'control' the scene. This is a shame, because that was not our intention; we genuinely want the PD scene to succeed, but if our readers don't know where to get the stuff we review, and consequently have to trawl through loads of PD libraries not sure which ones have got what, frankly, they're not going to bother.

By the way, please don't send SAEs to *AA*. We simply don't have the time to answer all queries personally. Letters that need answers, will be answered, okay. **Dave**

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Amscene

What's hot and not what's not on the CPC news front.

Don't miss this chance to subscribe



Dave Golder – would you buy a magazine off this man?

Because you demanded it – the subscriptions service has returned! Now you can guarantee that *AA* gets delivered to your door every month for year, and save a massive £12 in the process. That's the equivalent of getting *AA* free for a third of the year. Can't be bad, can it?

But there's also another reason for subscribing – to put it bluntly, the more subscribers we have the more we can improve the magazine. As long-time readers cannot fail to have noticed, the magazine has been regularly shrinking for some time now owing to a hard economic fact – because there are fewer Amstrad users about, we have fewer readers and therefore fewer resources to devote to the magazine.

But there are still thousands of Amstrad users out there who deserve a decent magazine every month, many of whom even have trouble getting hold of *AA* in the newsagents. And we want to continue providing a brilliant service for you. How subscriptions help is that the newsagents and distributors don't take their slice of cash out of the coverprice. The result – cheaper issues for you, more money for us, and a better magazine with a rosey future for everybody. So go on, invest in a subscription – it doesn't just benefit you (and us) but all *AA* readers. Dave

Robot roll 'em out

After a period of relative inactivity, Robot PD is back with a vengeance with no less than three new products looming in the not-too-distant future.

First up is *Better Than Life*, described as, "the most eagerly-awaited new fanzine from the country's most crazed CPC enthusiasts." Contributors include Robot's main man Richard Fairhurst and Rob Scott and articles include news, reviews, games tests, some in-depth serious stuff and lot of mickey-taking. *BTL* should be out about now, comes on disk and is expected to cost £2.25.

PowerPage 128 version 1.2 is a faster and more friendly version of the popular DTP package. It's due out about now at a price of £2.25, and current version 1.0 and 1.1 users can upgrade for free.

ChaRleyTraCker, is yet another sound package, but Richard Fairhurst reckons it's better, easier to use and better value than any other 'tracker around. Price: £2.25. Release: sometime very soon.

All of this little lot are available from Robot PD, 2 Trent Road, Oakham, Rutland, LE15 6HF. All prices are subject to change.

This month's FES plug

Another month, another FES plug. What d'you mean, what's the FES? It's the Future Entertainment Show, the world' s greatest computer show open to the public, that's what it is and it'll be taking place at Earl's Court in London from 26th to 30th October.

The Future Entertainment Show — Earls Court 2, 26th – 30th October 1994

The latest news is that the Future Zone chain of computer shops will be sponsoring the National Games Championship, the final of which will be held at the FES.

Preliminary rounds will be taking place in Future Zone stores around the country (☎ 0891 332288 for details of the store nearest to you which is taking part). While no CPC games will be in the competition, if you think your gamesplaying skills can beat any pompous old console or 16-bit owner, take part and kick butt. There's an entry fee of 50p which goes to the charity, BLISS (Baby Life Support Systems).

Tickets for the FES will be £6 in advance and £7 on the door. The ticket hotline number is ☎ 0369 4235 (this is not a typo).

DIY ROMbox

Fancy building your own ROMbox? It's not as tricky as you might think. But if you haven't got the foggiest clue where to start, then the best place is probably Campursoft.

Y'see the latest release from the Scotland's leading purveyor of fine CPC software is a PD DIY ROMbox project. The completely free on-disc tutorial shows you how to build your own eight-socket ROMbox

So, if you fancy a bit of soldering, and want to produce something more useful than a few blobby bits of metal, send along a disc and a jiffy bag to Campursoft, 10 McIntosh Court, Wellpark, Glasgow G31 2HW ☎ 041 554 4735.

Campursoft are also concerned about inferior, pirated copies of *MicroDesign* which are doing the rounds, and ask you to only order the program direct from Campursoft.

Call of the South

Distressed by the lack of CPC activity in the south west of this sceptred isle (whatever that means), Plymouth's Dave Stitson is on the look out for 'Stradders who want to start a South West Amstrad Users' Club. Interested? Then write to Dave Stitson, 4 Connaught Avenue, Mutley, Plymouth, PL4 7BX.

How to get there from here

Besides working on all his own projects for Robot PD, Richard Fairhurst has also been working on the commercial program *RoutePlanner*. Due for imminent release from Sentinel Software (☎ 081 876 7032), *RoutePlanner* is the 'first ever road navigation package for any 8-bit computer.'

Basically you tell *RoutePlanner* where you are and where you want to get to, and it works out the quickest route by road, displays that route on screen and prints out an itinerary.

The full version will cost £19.95 . But hopefully next month *AA* will be carry a demo version of the program on the covertape.



Become a King of the road with RoutePlanner.

Don't buy our stuff from Ultra, say SD Microsystems

Talk about a headline that says it all. Basically, Steve Denson of SD Microsystems contacted *AA* after hearing that a lot of people are having trouble obtaining their orders from Ultra Software.

SD Microsystems did a deal Ultra allowing the mail order company to sell SD Microsystems products last year. Since then, Denson claims, Ultra have not ordered any stocks off SD Microsystems.

"I find it hard to believe they have not received any orders for any of our products in that time," said Denson.

He is now urging people to order from his company direct once again. SD Microsystems are responsible for programs like this month's covertape art package *Picasso*, and can be contacted on ☎ 0760 720381.

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OFFER CLOSES AUGUST 31ST 1994 AA/MAG/894

Serious ACTION



Forget The Flintstones. The audiovisual entertainment event of the month is here – *AA* Covertape 41 (blimey, that's more sequels than Police Academy). Simon Forrester fills you in on the plot...

IKARI WARRIORS

Because you demanded it... well J Woodiscroft of Droitwich demanded it, so you can blame it all on him, okay...

No nonsense game, this, but make sure the first thing you do before anything else is define your keys. The directional keys are all very easy to understand – and wimps can play with a joystck or joypad of course – but you'll also be asked for a toggle key. Don't worry about what that does for the minute, as we'll come to it later.

The plot

Ikari Warriors. Right. What plot would you like for this one? Ah – top secret military plans to be rescued from the hands of evil minds that could put the latest US weaponry to some really dastardly uses? Better still, let's have a top military professor, who's defected from the enemy forces only to be recaptured and subjected to some of the most horrible forms of torture known to man. And it's your job to get him out.

The game starts with you, laden with 50 grenades and 100 rounds of ammunition, having penetrated the impenetrable jungle and running straight into an enemy base (you know how it is on these missions). Before you have time to think, you're swamped by the bad guys, all of whom could be made a lot less aggressive if you start dishing out the lead in a big way.

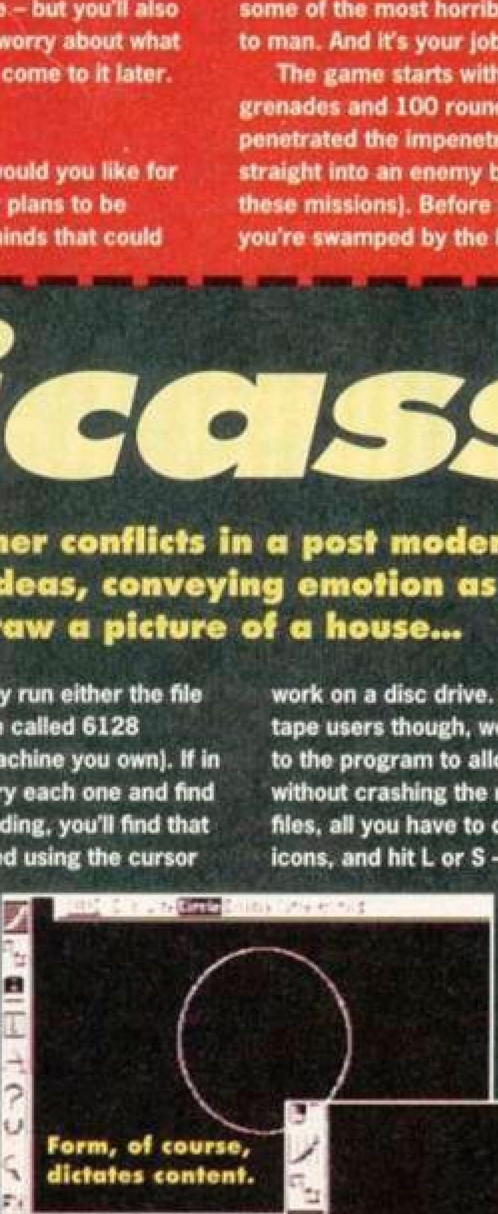
The task ahead of you is simple – use your vast array of weapons and just as many lives to travel up the screen, though the scrolling base, to the professor, and get him back. Basically, run like hell, firing like hell.

To shoot press fire (in time-honoured tradition). If you hold down the fire button, you'll find yourself spitting grenades, but be very careful, as these travel in an arc before hitting the ground and exploding, and so are useless for close-range combat. You will need them, though – there are quite a few cannons, fortress walls, gun placements and even the occasional helicopter to trash if you plan to complete your mission.

Picasso

Express your inner conflicts in a post modern digital collage of colours and ideas, conveying emotion as a visual attack. Either that or draw a picture of a house...

To load *Picasso*, simply run either the file called 464, or the file called 6128 (depending on the machine you own). If in doubt (664 owners – bah), try each one and find out which one works. On loading, you'll find that your cursor can be controlled using the cursor keys and copy. The cursor will happily move around the screen, but on hitting the stack of icons on the left-hand side will turn into a larger square for selecting functions. These icons, in order, represent fill, curve, memory, disc, information, character, miscellaneous, palette, zoom and effects. All we need to do is go through the options under each one, and we've got a perfect understanding of *Picasso*.



Form, of course, dictates content.

But before we go any further, this is actually a disc package, and so the filing routines will all work on a disc drive. Because there are so many tape users though, we've added a special patch to the program to allow easy saving and loading without crashing the machine. To load and save files, all you have to do is move the cursor to the icons, and hit L or S – your screen will be loaded and saved under a default filename. Be warned, though – you won't be prompted for tapes and keypresses – the screen will be squirted down the line whether you like it or not. Sorry if this all seems a little cranky, but that's the price you pay for wanting to use a disc-only art package on a tape-driven machine.



Reminiscent of early Monet, we feel.

Anyway, those icons. There seems very little point in going through every single function in turn (very little space as well), so we'll go through some of the more complicated functions, and leave you to work the rest out for yourself.

- FILL – Apart from the standard fill option (move your cursor into an area and press fire to fill that area in the current pen colour) there are a few more sophisticated fill functions provided, such as pattern and circle. On selecting these, you must select a reference area of the screen using two cross-hairs to create a rectangle, and then select the area to be filled. The original reference area will be the pattern you fill with. Be warned though – you cannot fill an area with a pattern containing the original colour of the area to be filled.
- CURVE – To draw circles or ellipses, select a point on screen and use the cursor keys to then expand or contract the shape (symbolised for now by the reference dots), finally pressing COPY to draw the shape. If you select the actual curve function (as opposed to just the icon), you'll be able to plot three points on screen, and the program will draw the best curve it can, intersecting those three points.
- MEMORY – Dead handy, this. If you want to cut a section of your picture out, simply select the store option, and define a box with your cross hair cursors. To display the saved image


Who'd want to be an enemy soldier?




The hours are long, the pay is dreadful...


...and as for life expectancy – hah!

Replenishing

When you're down to your last few bullets and your grenades have all dried up, you're going to wish you'd read these instructions a little more thoroughly before wading in. If you do need to pick up any extra ammo, you can find it and various other power-ups in the form of icons left behind by green soldiers you've killed, and the larger buildings you've destroyed.

Other power-ups aren't all that impressive, but if you do get a chance to grab any, go for it – you can upgrade your grenades to the type that throws shrapnel around the place, as well as gaining valuable extra fuel.

Toggling

It's about time we dealt with the toggle switch, then. Have you noticed how at some points in the game firing in the direction you're running isn't all that helpful? If you want to run in one direction and fire in another, simply line up your gun and hit your toggle switch. Now, no matter which direction you run in, you'll always fire in the direction you originally picked. To start behaving normally again, simply hit the toggle key a second time (and take that damned carp out of your ear).

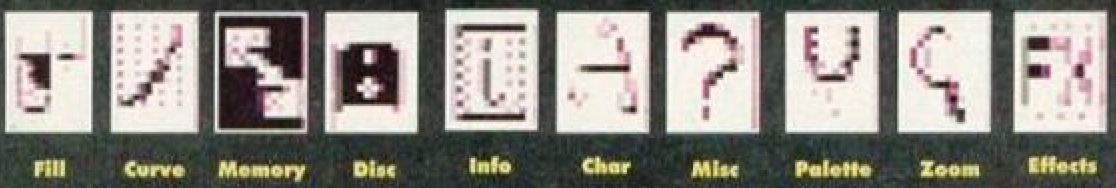
Tanks

One final thing before we go – tanks. If you see any lying unattended, you can steal them by holding down your fire button when standing on top of them. As soon as you're inside, you can forget the worries of the world and start running people over. A fuel gauge will tell you exactly how much further you can travel, though more fuel can be found by collecting power-ups. The only thing that can trash you now is a grenade, but your tank will flash when hit, giving you enough time to get out and run to a safe distance before the whole thing explodes. Have fun.


Run over enemy soldiers with your tank.

DUMP

Thanks to SD Microsystems again, you can now get all those pretty pictures onto paper. Simply run the program and sit back. If you're a tape user, simply hit ESC when the catalogue starts. After this, all you have to do is enter the filename of the picture to be printed (making sure your printer is ready to go with paper and everything). Fabulously simple. I'll wait for the reader calls.



again, you'll need to select the view function, and the whole thing will be displayed on screen again. There are various things you can then do to the image, but these are all incredibly easy to follow, so you shouldn't have too much trouble.

The other option under this icon you might want to use is ROLL. This allows you to define an area, and roll the selected image around using the cursor keys. This is handy for moving a section of a picture without using up any memory, or losing the image you stored earlier.

- DISC – Ignore this for now, as it's useless to us.
- INFORMATION – All of the functions under this icon are self-explanatory, except for the gridlock setting. This allows you to restrict how freely your cursor can move around the screen, letting you draw pictures using a grid reference. If you're not sure how it works, the best thing to do is try it out – you can't damage your picture.
- CHARACTER – There isn't anything about this icon that'll pose a problem for you either, except for 'chargen', the character definer. On selecting this, you'll be presented with a grid of squares, making up a character in the font. To alter this character, simply move your cursor around and hit COPY to toggle a pixel. Holding down SHIFT and using the cursor keys will let you cycle through each character in the set.
- MISCELLANEOUS – Easy peasy.
- PALETTE – The only two options here you should worry about are PEN and DUAL. When changing your pen colour, you can move left and right from pen to pen, and up and down to select the colour of the currently selected pen.

The DUAL function works in the same way, only with two lines, the second one being moved with the cursor keys while SHIFT is held down. This is for use with any functions that use two colours simultaneously, such as the random fill.

- ZOOM – Select an area of screen for the zoom window to use. Once this is done, you can move your cursor around as normal with the cursor keys, using COPY to plot pixels in your current pen colour. To change pens, use SHIFT and COPY, and to finish using the zoom mode, press CTRL and COPY.
- EFFECTS – To be honest, if there ever is anything under this icon you want to use, you'll be able to work it out for yourself, as everything is very much automatic from here on in.

That's it – we look forward to seeing what you can produce with this fabulous art package.

Loading instructions

Getting started

To load up either side of the tape, simply rewind it, hold down CONTROL and press ENTER. Owners of 6128s or 664s will have to switch their machines to work with tape by typing |TAPE first.

Tape to disk offer

If you've got a disk drive and you want to get a disk version of this month's tape it's easy. Whip out your scissors and cut off that token at bottom of this page, chuck it in an envelope along with your name and address and a cheque or postal order for £2 made out to Ablex Audio Video, then send off the whole kit'n'kaboodle to:

**AA107 Disk Offer,
Ablex Audio Video,
Harcourt, Halesfield 14,
Telford, Shropshire TF7 4QD.
☎ 0952 680131**

Loading troubles?

We make the greatest efforts to ensure our cover- tapes work properly, but if you've tried all that and your tape's still not loading then pop it in the post (with a note telling us your name, address, type of CPC you use and a description of the problem) to the address above.

NB When returning faulty tapes could you please also include a stamped, self-addressed envelope. Thank you.

Disk 107 Token

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AA95: Covertape: *MasterCalc* (spreadsheet), *Biff.* Inside: *Street Fighter 2* – the myth starts here. Reviews: *Pro-Ext, SmArt Plus, Trakers.*
AA96: Covertape: *Screen Designer* (art package), *Neil Android.* Inside: ROM round-up, Campursoft interview. Reviews: *ZXM, Xexor,* Cart round-up.
AA97: Covertape: *Rik The Roadie* (okay, okay), *Zzap Assembler.* Inside: The best software you can get for under a fiver, debugging. Reviews: *Ultimate Sprite Searcher, Forth, Galactic Warfare, Ball Bearing.*
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Basically Basic

All that glitters is not gold. Simon Forrester doesn't even glitter (*or even, indeed, glister – picky literary Ed*) but maybe silicon will do instead. Meanwhile, back at the ranch...



Loops. We've already covered them in pretty heavy detail in previous Basic tutorials, but this month we're going to look at a new type – a **WHILE/WEND** loop.

It's called a **WHILE/WEND** loop because it comprises two commands, **WHILE** and **WEND**. Let's try out a very simple one:

```
10 l=100
20 WHILE 10
30 l=l-1
40 WEND
```

Let's go through that line by line:

10 l=100
This line simply sets up a variable containing the value 100.

20 WHILE 10
This is the first line of the loop. It's stating that this loop will continue **WHILE** the **l** variable is bigger or smaller than zero.

30 l=l-1
This is the routine inside our loop – it simply decreases l by one each time the loop is executed. Because **l** initially contained 100, this line will be executed 100 times.

40 WEND
This command marks the end of the loop, so the **WHILE** command knows where to loop back from.

Sorry, I didn't understand that at all

Look – imagine a **FOR/NEXT** loop. When we set one up, we have to give a value and two parameters that the variable will work through:

```
FOR a=1 TO 100
```

This will execute a loop 100 times, the **a** variable keeping count of how many times the loop's already gone around. This is farther away from our loop, which resembles an **IF** command. The four line program we've just used could have been:

```
10 l=100
20 IF l=0 THEN END
30 l=l-1
40 GOTO 20
```

But that's too complicated – you need to tell line 20 what to do after the loop has finished (when **l** contains zero), and you need to tell the end of the loop where the start is. With **WHILE** and **WEND**, you could set up a very simple password system very easily:

```
WHILE p$"Grop"
INPUT "Password:",p$
WEND
```

And it's so simple you don't even need line numbers! These two commands have some other handy uses as well.

Why bother?

If you're wondering why these WHILE/WEND loops even exist, here are those advantages in full:

- **You don't need to specify line numbers in the commands.**
- **You can set conditions that aren't numbers (NOT EOF, etc).**
- **You can continually check for flags.**
- **You don't have the hassle of keeping variable names free.**
- **And last, but by no means least, they're faster than FOR/NEXT loops.**

Another handy use

If you've got any ASCII files you want to read, try this:

```
10 OPENIN "filename.ext"
20 WHILE NOT EOF
30 LINE INPUT #9,a$
40 PRINT a$
50 WEND
60 CLOSEIN
```

Odd one, this; let's go through it line by line:

10 OPENIN "filename.ext"
This tells the CPC which file to look at, by asking it to **OPEN** an **IN**put file.

20 WHILE NOT EOF
This **WHILE** command looks like something special, but it's not. You could have used **WHILE 1** in that last program, and the loop would have continued until **l** was zero. This time, we're using a CPC system variable **EOF**, which states whether the file reader has reached the end of a file or not. That's the one we're waiting for, so our loop has to run while the **EOF** variable is zero. As soon as **EOF** contains a real value, the loop will finish.

30 LINE INPUT #9,a$
You may not have seen this one before, but it reads in a line from the text file the CPC has opened.

40 PRINT a$
Then that line gets printed to the screen.

50 WEND
Now it's safe to go back to the start of the loop, and read in the next line.

60 CLOSEIN
If the loop has finished, though, we need to **CLOSE** the **IN**put file.

There we go

What more do you need to know? You can use any condition you want to within a **WHILE/WEND** loop, a facility that should shorten your programs a great deal. Have fun.

Next month

"I was really scared that night. I knew what I saw couldn't have been real, but that was no comfort. Needless to say, I haven't been back there, and I don't think I ever will. Sometimes things are best left exactly as they are. And when He walked in – I shook in terror. I knew then what's only a hazy memory now – the 'tutorial' sessions would continue. Forever. I still have the scars"

And cleaving a massive rift through little Billy's soul next month will be a crash course on Basic sound and music.



Techy

If your disc drive is overheating or you've got sand in your silicon chips, Richard Fairhurst suggests that you don't use your CPC on the beach. He's good with advice like that, is Richard.

Aversion to versions

I am the proud owner of two 464s and a DDI-1 disc drive. I have recently purchased a Multiface 2, and when I use it with the older 464 – ie, the one where everything plugs into the back – I have no trouble at all. When I try to use it on the newer version, all I get is a load of garbage on-screen. Is there a reason for this, or is the Multiface not compatible with the newer version of the 464?

And please don't tell me just to clean the contacts. They are so clean, you could safely use them in a hospital.

Kerry Davies, Bury

You don't make it clear from your letter what you mean by an 'older' and 'newer version' of the CPC. If you're talking about a 464 Plus, it's quite true that the Multiface is incompatible. You need a special Plus-compatible version, which those nice people at Romantic Robot (☎ 081 200 8870) will happily sell you.

But if you mean that your 464s have only the minor differences of keyboard style, location of plugs and so on, then there must be something wrong with the newer one. Does other equipment fit into the expansion port happily? This could help you see where your problem is. **Richard**

Scrolls of wisdom

Please could you print a short routine in BASIC that will scroll a certain number of lines (to be stored in 'lines'), starting at a certain position on the screen (to be stored in 'start', eg, start=6 means line 6) and ending at a certain line (to be stored in 'end'), to enable me to make large scrollies on the screen. You printed a routine a few months ago to scroll the whole screen, but unfortunately it's no good for making scrollies on a stationary background.

Donal McCarthy, Cork

A purely BASIC routine won't do for a problem like this, because BASIC's just too slow. But here's a machine code routine that'll do the job, and can be used from BASIC as an RSX. Type **|LSCROLL,6,10** to scroll lines 6 to 10 left and **|RSCROLL,3,7** to scroll lines 3 to 7 right. Make sure that the whole screen hasn't scrolled up or down since the last MODE change, though.

```
100 IF HIMEM=&7FFF THEN 180
110 MEMORY &7FFF:csum=0
120 FOR n=&8000 TO &8078
130  READ a$:r=VAL("&"+a$)
140  POKE n,r:csum=csum+r
150 NEXT:READ c
160 IF c<>csum THEN PRINT"Error!":END
170 CALL &8000
180 DATA 21,0F,80,01,13,80,CD,D1,BC,3E
190 DATA C9,32,00,80,C9,BD,A2,13,80,1B
200 DATA 80,C3,2A,80,C3,41,80,4C,53,43
210 DATA 52,4F,4C,CC,52,53,43,52,4F,4C
220 DATA CC,00,CD,5A,80,3E,08,C5,E5,54
230 DATA 5D,23,23,ED,B0,E1,01,00,08,09
240 DATA C1,3D,20,EF,C9,CD,5A,80,3E,08
250 DATA 09,23,C5,E5,54,5D,2B,2B,ED,B8
260 DATA E1,01,00,08,09,C1,3D,20,EF,C9
270 DATA DD,7E,00,DD,96,02,3C,21,00,00
280 DATA 11,50,00,19,3D,20,FC,E5,26,00
290 DATA DD,6E,02,2D,CD,1A,BC,C1,0B,0B
300 DATA C9,&2FCE
```

Hope this does the job. **Richard**

Save the Multiface

Making a change from my contributions to the Cheat Mode pages, I have decided to tax you about a problem I have. One of my friends from

Top Tips

10 top tips for... word-processing

It's all very well typing out a letter on a posh PC and printing it out on a highly expensive laser printer, but your CPC is perfectly capable of producing smart-looking pages – if you follow a few simple rules. Here are Techy Forum's 10 tips for producing professional-looking documents.

1 Be careful with punctuation – especially spaces. There should only be a space before the start of each word (ie none between the end of a word and a comma , for example), except at the start of a passage in quote marks or brackets, when it comes before the "quote" or (bracket).

2 Similarly, watch your layout. The standard these days is to have a blank line between paragraphs, but indenting the first line of a paragraph will also work…

3 …and on the subject of indenting, always use TABs. Never press SPACE repeatedly.

4 Avoid fanfold paper: it's cheap, and looks it. Use single-sheet A4 instead.

5 As with DTP, consistency and moderation are important. Find a style you like and stick with it; a common one is to use italics for emphasis, underlining for main headings and bold for sub-headings.

6 When saving documents on disc, an old favourite is to organise them so that they appear in chronological order when CATalogued (particularly useful with large-format 3.5-inch discs). To achieve this, save a letter to Fred written on 27.8.94 as "FRD27894". For October, November and December, use "A", "B" and "C", hex-style. Alternatively, you might just be happy with saving files as "FRED.01", "FRED.02" and so on.

7 If you justify text, it might be worth your while checking to see if the printer has a justification mode that you can use instead of the word-processor's built-in one. If so, it will probably use micro-justification, which gives even spacing over the whole line rather than the rather primitive 'multiple spaces' approach used by most programs.

8 Proof-read your final print out. It's amazing how many mistakes only become apparent on the page.

9 If you have a spell-checker, use it – and check every word in your Pocket Oxford before adding it to the user dictionary.

10 Finally, to make the output look a bit flashier, have a look at the many print enhancers available. *Qualitas*, Arnor's *Protype* and Campursoft's *Pro-Print* are very similar to the PD programs *Epic* and *Print Enhancer*, in that they replace your printer's standard lettering style with a new, user-choosable font; Sentinel's *Pro-Ext* is quite different, letting you insert large headlines and graphics into *Protext* documents. (Plus, for every copy you buy, a small sum goes towards the Richard Fairhurst Chocolate Cake fund.)

A spectacle

And in this month's machine code source spot, here's a very fast little routine to convert a MODE 1 Spectrum-sized screen (loaded at &4000) – the sort you might get from a badly-converted game with a Multiface – into a normal Amstrad screen.

```
    ld hl,&C000: ld de,&4000
    push de: push hl
     ld bc,&4000: ldir
     ld a,1: call &BC0E
    pop hl: pop de
.olloop  ld a,24
.lnloop  ld bc,64: ldir: ex de,hl
    ld bc,16: add hl,bc: ex de,hl
    dec a: jr nz,lnloop
    ld bc,512: add hl,bc: ex de,hl
    ld bc,128: add hl,bc: ex de,hl
    ld a,d: or e: jr nz,olloop
    ret
```

Unfunny joke

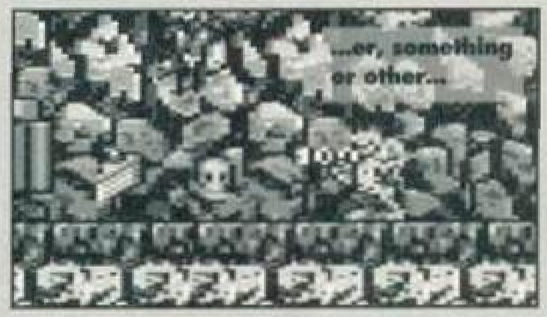
Alan Tilling of 65 Lawrence Road, Altrincham WA14 4EL writes: "In the June issue of *Amstrad Action* you published a letter from S Valavanis asking for information leading to the capture of a word-processor in Ellhnika. I have designed a Greek font using *Qualitas* and patched it onto *Protext*. One day I will modify *Protext* to write Greek direct to the screen. So far I've not needed to and so I have been lazy."

Thanks very much. Modifying *Protext*'s screen display is actually very easy – just use the usual **SYMBOL** and **SYMBOL AFTER** commands, and it will co-operate. **Richard**

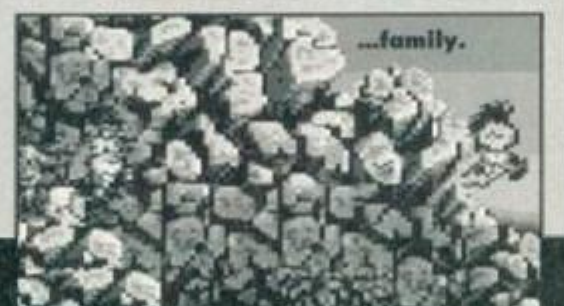
Forum



Flintstones, meet the Flintstones, they're the...



...er, something or other...



...family.

college has a 6128 and wanted to back up some of his tape software to disc. The games he gave me were quite old and did not use modern loading methods. I managed to load in some of the files to try and save them out as binary files again, but because some of the files were so long, they over-ran the disc operating system and so would not let me use the |DISC command. So would it be possible for you to print a routine that could be used with the Multiface to save the contents of memory without protection? In other words, a program that could be jumped to using the jump command which would be hidden in a ROM area and accessed with a few bytes.
Kevin Penn, Bridgewater

You could try this, but you're still going to have problems reloading the files because they'll over-run the disc operating system even then. If you're set on this option, the best method is to use Phil Howard's rather nice Multiface decompression routine, which takes the saved files and turns them into normal binary files. Search though your old *AAs*, or get hold of JW Brown's hacking utility from your favourite PD library, which includes the same routine.

While you're at it, ask for *Anti-Multiface* (a rather nice program by the renowned French programmer Serge Querne), which enables you to load Multiface-saved games on any 128k computer without the Multiface – making your job very easy indeed. **Richard**

Service!

I first got together with Arnold in way back in '84. Since then we have had many years of enjoyment together, but sadly Arnold is at rest now (*have you been using the same computer all that time? I'm not surprised it needs a rest – Richard*). Is there a service/repair manual and/or drawings available for my CPC 464 and CTM 640, so I could attempt to bring Arnold back to life? Or must I sit in front of a faceless screen and silent keys, remembering the good times of the past 10 years?
Stephen Cooper, Stourbridge

You should be able to obtain service manuals from CPC Ltd in Preston, Lancs (☎ 0772 654455), who are Amstrad's major parts distributors. But a word of warning – check with your local electronic repairman to see if he has a trade account with them, because personal orders can be pricey. Alternatively, if you can get yourself along to an All Formats Computer Fair, they're often for sale there. **Richard**

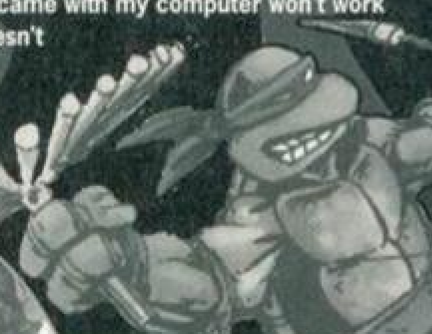
(Pre)history in the making

I recently bought a copy of *Prehistorik 2* for the CPC 6128. A few days later, I verified the disc and it said that there was an error on sector 30 – media changed (within system track). What does this mean and what can it do to the program?
Benjamin Weber, Lancaster

Many commercial disc games are protected against illegal copying, and this frequently involves confusing the computer into thinking that there's an error on the disc when it tries to read it in the usual fashion – cunning, eh? But if the game works, don't fix it. **Richard**

Logology

I have a 6128 and my younger brother has a 464. He would like to be able to use 'turtle graphics' on his computer, but the copy of *Dr Logo* that came with my computer won't work on his (he doesn't have a disc drive). Is there any way that I can write a program to work this way? BASIC please, not Machine Code.
Anthony Dixon, Nottingham



Er, those aren't quite the sort of Turtle graphics I had in mind, actually... oh never mind.

The basic idea of 'turtle graphics' is that you get the cursor to move from place to place on the screen by plotting the route along at a certain angles: in *Logo*, for example, `RIGHT 30 FORWARD 100` would make the cursor turn 30 degrees to the right and



The best thing about old-fashioned vinyl juke boxes was that, unlike with CD juke boxes, no-one could put on the whole of Pink Floyd's *Dark Side Of The Moon*.

Juke Box Jury

Please help me to make my two year-old daughter's *Juke Box* work a little better. I enclose a screen dump from, and listing of, a program I have written to play tunes arranged using the *Bootracker* program from your covertape.

I have been trying, without success, to modify the program so that once a tune has been chosen (using a single keypress), the program will wait until that tune has finished before another can be selected. With the current program, if Danielle holds a key down too long, the tune is immediately reselected and reloaded from disc, interrupting the tune currently playing. Similarly, if she presses two keys simultaneously, the beginning of the tunes are corrupted until the keyboard buffer runs out of (accidental) selections.

I have tried various combinations of WHILE/WEND loops and sound queue testing, but as there are inevitably rests in some of the tunes, this cannot always work. Neither will a FOR/NEXT loop produce a suitable delay, as the tunes vary greatly in length. Please help before Daniella works it out and embarrasses us all.
MD Pitkin (Daniella's Dad), Bristol

This short routine will loop until there has been no sound at all for two seconds – if you want to change this time then replace the two occurrences of 600 with another number.

```
171 t=TIME: r=0
172 WHILE SQ(1)=4 AND SQ(2)=4 AND
SQ(4)=4 AND r<600
173 r=TIME-t: WEND
174 IF r<600 THEN 171
```

In addition, you might want an extra line to ignore any keys pressed. One simple way to do it would be to add `i$=INKEY$:` to the start of line 173, or you could add a new line `175: CLEAR INPUT` on the 664, 6128 and Plus, or on any machine, `WHILE INKEY$<>"": WEND`.

The sound-testing method will work fine on *Bootracker, Advanced Music System, Music Maker* and such like – however, programs that use the more sophisticated hardware sound generation, such as *Equinoxe, Soundtrakker* and *ChaRleyTraCker*, won't co-operate. **Richard**

move forward 100 steps. Here's how you could perform that exact same manoeuvre in BASIC:

```
100 DEG
110 MOVE 100,100
120 DRAWR 100*SIN(30),100*COS(30)
```

The first line of this handly little programmette sets the computer into degrees mode for calculations (it usually works with radians, which aren't much use... in life generally, in fact). The second moves to a starting-place on the screen and the third draws the line. DRAWR tells the computer to draw a certain distance relative to the current cursor position, 100 is the length of the line, and 30 is the angle we want to move. It's all surprisingly logical really.

You can use this technique for as many lines as you like, but if you wanted to move 90 degrees to the right next time, for example, you'd have to use SIN(120) and COS(120) – adding the degree onto the current angle of your imaginary turtle. **Richard**

Clocked up

I decided I would like the clock program (*Techy Forum 103 – Richard*) so I dutifully typed it out. I then found I couldn't, for some unknown reason, get it to run. So I waited to see what the *Toolkit* would do to solve my problem. Sure enough, there it was – |CLI. But I'm afraid I still got the same 'Unknown command'.

Help! I really would like the clock program in my repertoire. I thought the *Toolkit* was excellent, especially for beginners like myself, and I'm very much a beginner.

RL Elms, Isle of Wight

Oops. Sorry about that. Okay, I admit it. There was a missing MEMORY &9FFF from the Clock listing: add that in (as line 5, for example) and it should work perfectly. I'll just go and hang myself, shall I? **Richard**

Clunk, clip

Having recently acquired a copy of *PowerPage* 128 from Robot PD, I tried unsuccessfully to transfer the clip-art files (supplied on the covertape of *AA99*) to disc, with the intention of using them within *PowerPage*. Being a newcomer to the serious side of the CPC, I would appreciate some advice on how to transfer these files.

AD Lifford, Manchester

What a sensible, man buying such a brilliant piece of software as *PowerPage*... (*hang on, that's enough of a plug – Dave*). The easiest way to transfer screen files (which is basically what the clip-art is) to disc is by using a simple program like this:

```
10 |TAPE: LOAD "!",&C000
20 |DISC: SAVE "CLIP1.SCR",B,&C000,&4000
```

The first line loads the screen in from tape (make sure that it's rewound to the position just before the clip art starts), and the second line saves it to a disc. You might want to change the filename from CLIP1.SCR to CLIP2.SCR when you run the program again to transfer the second screen of clip art.

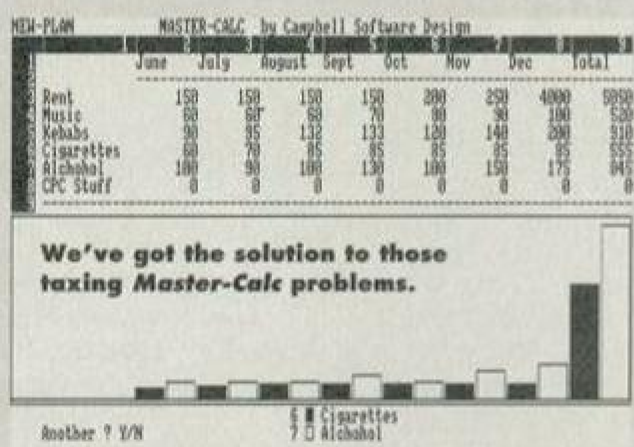
Once it's on disc, you can load it into *PowerPage* 128 with the 'Load picture' option. So that you can load pictures individually in the future, you might find it convenient to save each one out as a piece of clip art – depending on which version of *PowerPage 128* you've got, this option will either be on the 'Block' or the 'File' menu. **Richard**

Cent Pour Cent

1 What is the formula for calculating a percentage in *Master-Calc* (which was featured on a previous covertape)? I am trying to produce a Value Added Tax conversion chart.

2 I am thinking of getting the Panasonic KX-P2123 colour printer for my 21st birthday (my current printer is the Amstrad DMP3160), and I want to know if it is immediately compatible with *Tasword, Master-Calc, Masterfile, Mini Office 2*, etc, or will some alterations to the printer DIP switches be required?

Paul Jennion, Wigan



We've got the solution to those taxing *Master-Calc* problems.

1 To add 17.5 per cent onto a number, multiply it by 1.175 – or to find out 17.5 per cent of a number, multiply it by 0.175.

2 As for the printer, please remember that we don't have encyclopedic knowledge of the ins and outs of every single printer on the market. However, here's a checklist for CPC compatibility:

- Does it have a Centronics interface (almost all do)? This is essential.
- Is it Epson-compatible (most are)? If not, many programs will need their printer codes customising, and some just plain won't work.
- Even if it's Epson-compatible, if it is a 24-pin, bubble-jet, ink-jet or laser printer, can it emulate a 9-pin Epson printer in graphics mode? You may have serious problems trying to print graphics from most programs unless it can.
- If it's a colour printer, does it use the same system for changing colours as a Star printer? The Star system is pretty unique, but since they've sold more colour printers to CPC users than any other manufacturer, most colour screen-dump programs (eg, *Colourdump 3*) will only co-operate with them.

The factory settings of DIP switches are usually the set you're most likely to use, but a few may be more suited to the PC market (especially the characters from 128 to 255, although they're not usually that easy to access from a CPC anyway). The only one setting you'll probably need to change is the 'language' setting, which determines whether the printer is in US mode (and prints a # sign) or UK mode (and prints a £). By the way, isn't American English a contradiction in terms? **Richard**

Not so advanced

I have a 464 Plus and have recently bought the *Advanced Art Studio* with all the necessary extras. When I load it up everything goes fine, but when I click on a menu it immediately crashes. I know how to regain artwork after it has crashed, but I have never got far enough to create any. Do you have any suggestions?

James Richins, Uxbridge

This sounds remarkably like what happens when you try to run the (128k-only) *Advanced Art Studio* on a 64k machine. Do you have a memory expansion, or have you fitted the extra chips inside your Plus as we showed you how to not that long ago...? If not, it might be a good start.

Failing that, check that your extra memory is working. Switch on your 464 Plus, and type MEMORY &3FFF: POKE &4000,50. Then type OUT &7F00,&C4: PRINT PEEK(&4000). If the result is 50, your memory is faulty. Expansion port problems may be the problem if you're using an external RAM-pack, or if not, check that all the chips are plugged in correctly (the right way 'round, for example). You might want to check all the extra memory, which you can do by repeating the second line with C5, C6 and C7 in place of C4 in turn.

If none of this helps, unplug absolutely everything from your expansion port and see if any of that's interfering – it's often the case. **Richard**

Richard's nemesis

1 Describe salient features of the metrics and the ornamentation of Old Irish poetry (*Is that like the lyrics sheet from an early U2 album? – Dave*).

2 Describe the characteristics of the Old Irish verbal noun, contrasting it with infinitives of other languages, and exemplify its main usages.

3 What is the linguistic and cultural importance of the Old Irish glosses?

4-12 ...and so on

Dr Erich Poppe, Cambridge

I thought there was a strange lack of numbered questions this month. No such luck...! (*I think those finals exams are getting a bit too much for the poor chap – Dave*). **Richard**

How will our heroes get out of this one?



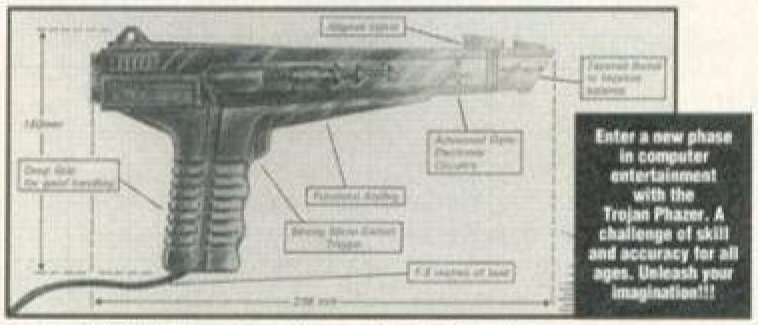
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BiZArRE

The world is not a logical place. Most things in life do not make sense. And when it comes to the CPC a disproportionate amount of things don't make sense. Over the years people have written some seriously odd software and built some completely pointless hunks of hardware. Simon Forrester takes a look at some of the weirder things people have got the Amstrad to do, while Richard Fairhurst and Keith Woods name the most pointless CPC products ever released...

So you bought this machine, having sat and watched countless Amstrad publicity shots of people using spreadsheets and playing *Roland on the Ropes*, and you got it home. You bought a CPC, and you started to use it. If you were normal, that is. There were those, you see, who watched the publicity shots with great interest but with a totally different viewpoint. The weirdos. Those are the people who created the CPC bits and pieces you'll soon be reading about – the weird side of the CPC. The march of the weirdos begins...

Red boxes

I am the all-powerful. Kneel before me, the mighty one (*very mighty sideways – Dave*). I have the knowledge. I have the force of thousands. I have the red boxes. I can put a CPC in a corner of my house, and open my curtains automatically at specific times of the day. I can turn my microwave on any time I like, whether I'm in or not.

The red boxes were deeply scary devices. The idea was that you took the box named Red Leader, and plugged it into your CPC. Red Leader then proceeded to communicate through your mains supply system to other red boxes on your CPC's request. These other red boxes were the ones that really did the work, opening curtains, turning on other devices that ran off the mains (washing machines pressure cookers, etc). The only problem the boxes then had to face was in the marketing department, facing a nation of CPC users asking the same question; why?



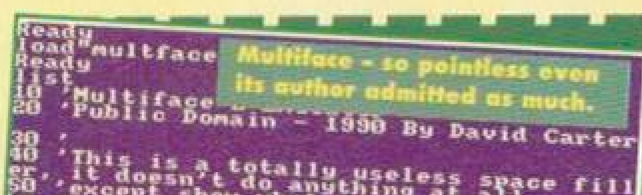
The problems started when you unpacked the boxes and ran the software, realising to your horror that this means your machine has to be tied up 24 hours a day, constantly keeping check of the time in the eventuality that it may, someday, have to suddenly turn on your cooker in the middle of the night for no apparent reason.

But what's the point? Can you imagine any situation in which you really desperately needed a lamp to kick in at exactly 4pm every Tuesday? There are several million applications for a timer (horticulture, for instance), but there are several million timers available for each of those applications. Who needs a CPC to do the job?

Coming at around £40 each (two needed to be any use whatsoever), the Red Boxes have to be the weirdest use of a CPC ever. But then again...

The clicking drive

Did you know the CPC doesn't have to rely on its sound chip to produce noise? There have been a few demos that actually made use of the motor relay of the tape drive to create drumbeats to accompany



Multiface – so pointless even its author admitted as much.

Pointless PD

Reading Public Image every month you might think that the CPC PD world consists entirely of colourful machine code games and ingenious utilities. Unfortunately, this isn't the full picture. In fact, it's only a tiny portion of the picture – the best bit!

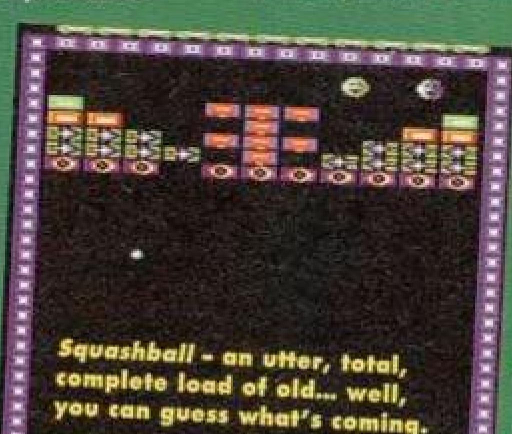
The thing is, I get a number of discs crammed with PD every month, and most of it, to be honest, is rubbish, and never gets reviewed. But now, just to prove to you you're not missing anything, we're going to take a look over that great mountain of pointless PD that we've been trying so hard to help you avoid, examining some of the most useless specimens along the way.

Games

The traditional stereotype of PD games as short Basic listings which do very little very slowly is... completely true! Many PD librarians still fill their game discs with jerky Basic bores that make *AA*'s Type-Ins look like full-price contenders, with just one gem like *Jumpmania* on the disc to make sure you want to get it. Tip: Avoid PD library selections with a seemingly impressive long list of contents.

If they're not Basic, they are, of course, clones. There are very few games in the public domain which aren't inspired by full-price counterparts. Topping the list are *Tetris* clones, which must surely account for about a quarter of all PD games. Incredibly, they still continue to flood the PD scene, and while new arrivals such as *Alinka* aren't bad, it's hard to understand why programmers keep producing clones far inferior to those already available.

At least *Tetris* was a good game originally.



Squashball – an utter, total, complete load of old... well, you can guess what's coming.

What are we to make of the game *Fruitrun* though, a clone of the utterly pointless *Fruit Machine Simulator* which received a princely 2 per cent charity mark when reviewed in *AA*. *Fruitrun*, believe it or not, is even worse.

And then there's the clone of the clone – *Squashball*. *Wipeout* is a pretty impressive PD bat and ball game of the *Arkanoid* variety, and *Squashball* is *Wipeout* with the sprites and a few other things changed. What makes this so awful is that the sprites are 10 times worse in *Squashball*! Yet some PD librarians still insist on stocking them both...

Demos

Many people (especially Simon) say all demos are completely pointless, yet some people

soundtracks, creating quite stunning sound effects. If you don't know what I mean, find a 6128 and type **CALL 19** followed by **CALL 20**, but at your own risk.

Emulators

The CPC can do a lot of weird things, probably the strangest of which is pretending it's a totally different computer altogether. Quite recently, a Spectrum emulator for the CPC was released (*ZXM*, reviewed in ish 94), letting you run those Speccy favourites on your machine with twice the capabilities.

The CPC comes with a massively advanced graphics system, an even better sound chip and a really quite good BASIC system, and someone decides to make it run like a Spectrum. Not only can you play better versions of just about any Speccy game you like on your CPC, but you can probably write more advanced stuff in BASIC. Still, *ZXM* sold.

Demo writing kits

Though I might be intruding somewhat on Keith Woods' pointless PD contribution, demo writing kits have to be mentioned. My views on demos have nothing to do with this (which makes a change), but the idea of the damned things is to give a programmer a chance to show off exactly what they can do. That was until someone released the demo writing kit. What a brilliant idea – you can decide where about you want the standard raster bars to wiggle, what you want the scrolling message to say, and what tune you'd like to play in the background.

Instantly, the PD scene was flooded with a deluge of demos designed by anyone and everyone to demonstrate exactly what a completely different programmer that no-one knew was capable of. WHY?

Copying fun

Things just get stranger and stranger with this scene. About two years back, a person who shall remain totally anonymous decided to write a copier with a difference. Tape-to-disc copiers are ten a penny, especially those designed to deal with normal CPC format files. As a slight change, you see, this individual decided to write a disc-to-tape copier, for all those who desperately wanted to lose the constraints of speed, reliability and easy access to run with a system of slow, unreliable analogue data storage.

So you've got a friend who owns a tape machine, and he wants some of your disc software (PD, mind). Do you copy it for him? Do you spend several hours trying to get a disc-only package to work from a tape system? No – you tell him to get stuffed. Nobody hates tapes more than someone who's just bought a disc drive and blown £40 on a pack of 10 discs.



The point escaped me, as it did the entire potential customer base, and the program never made it into the homes of millions.

CP/M

It might seem strange to include *CP/M* in this feature. The reason why we are is not because *CP/M*'s strange in itself, but because it's strange we need it at all.

Those mystical letters are an acronym for Command Programming Module, though even the abbreviated version can strike terror into the heart of the most mentally sound of CPC users.

The idea was straightforward enough – we've created a computer and added a disc system. Along with a physical disc drive, we've given the machine the facilities to use it in the form of an extra ROM chip containing software to patch the CPC to the drive as opposed to a tape system. We've also added commands for erasing and renaming files, an obvious necessity.

Damn – we forgot file copying, disc copying and formatting. You can walk up to a CPC with a brand new disc, and do absolutely sod all with the two together. To format discs you need *CP/M*.

CP/M is deep (an excuse as to why it continually crashes for no apparent reason). It's also designed about as well as a spaghetti strainer. It's primarily a disc operating system and filing utility, and it runs from disc. Every command you wanted to issue had to be stored on the disc currently in the drive. This meant your work disc had to have a minimum of about 50k of commands already stored on it.

Radio Hams

These are weird people from the word 'go' anyway, but if you've ever seen a Radio Ham's front room, you'll know just what lengths they can go to. Radio Hams are like modem users who don't want the phone bills, preferring to spend a hell of a lot more money on radio communication systems. These aren't part-timers, though – names like GKQ81XXY let you know exactly how serious they are. Forget Rubber Duck, these people talk in binary. The CPCs came into this at a later stage, when Hammers realised they could do about a thousand error-checking routines to counteract the fact that the airwaves are also full of a thousand people called The Gingerbread Man. These people continue to send data to each other at a rate of about 1k per week purely to further their hobby.

Train freaks

– You'll see them lined up in British Rail cafés. If you have trouble spotting them, they're the people with the thermos full of sweet coffee who run out



Be honest – could you be bothered to find keypress cheats in a demo? No, we didn't think so...

obviously like them as the PD libraries are full of the things. Most of them look the same, being made with the same demo-makers, but at least they usually carry something of interest to 'sceners' in their scrolling messages.

To most people though these 'scrollies' are mindnumbingly boring, which is a shame, as they are all many demos consist of. Nowhere is this more the case than in *To Delta*, a MAX, OEW (stands for One Eyed Willy – I think that says it all) and NWC production. This demo consists of nothing but a simple scroll on an even simpler background with no music or even rasters. You're treated to fascinating facts such as nine foreign names for the CPC and details of the coders' first computers (did you know that OEW once owned a Vic-20? Did you want to?). Zzzzzzzz....



Delta – a demo devoid of any of the things that make demos even vaguely bearable.

Probably the weirdest, most paradoxically pointless aspects of CPC demos, however, are the 'Cheat Modes'. How, you may well ask, can something without a shred of playability have a 'Cheat Mode'. Usually they consist of an extra message or demo-part, only seen when a complex keypress activates them. Most AST demos have them and the acclaimed *Voyage 1993 Megademo* has two (whoopee). The coders usually make the keypress difficult to find and challenge you to find it. The trouble is that most sane people couldn't care less, meaning that the keypress is never found and the coders' work goes to waste, making the whole thing incredibly pointless...



Squashball – a second generation clone, no less.

Utilities

The bulk of PD utilities are again, incredibly dreary and monotonous. At least half are simple disc copiers, and the rest are usually incomprehensible. The late David Carter's *Multiface* looks very promising upon loading, but all too soon it becomes clear it's just another pointless filler, as David said himself, as it only shows you what a multiface looks like, and not what it does.

The most pointless program of all though, must be NWC's *Life*. All it does is cycle rapidly through patterns of little green dots, again and again. It seems to be supposed to have something to do with evolution, but quite frankly, as with most of the programs in this feature, you really would want to be seriously lacking a life to spend any amount of time watching this one.

Moralising

The moral of this story is that if you want to avoid all this sort of trash and cut straight to the real gems that PD has to offer, you need look no further than Public Image, which brings you only the brightest and the best of PD software.

This has been a public service announcement. Thank you. Goodnight. **Keith**

in an excited frenzy tugging battered notebooks out of their pak-a-maks every time a train arrives. What you probably don't realise is that these people go home and vanish up to the attic, where they turn on their train sets. With a CPC.

That's right – it's wholly possible to run a model railway with a CPC, controlling the terminals, trains and points automatically. Whether they then leave it running and nip out for a pint is open to question.

Beating a dead horse

They bet as well, you know. *AA93* featured a program called *Racing Boxform* on its covertape, this being a utility to (hopefully) predict racing results. Shortly afterwards, Tim Norris left the mag, taking with him nothing but a CPC and a copy of *Boxform*, and now spends his time loafing around his Bristol mansion.

Bingo calling

Believe it or not lots of new, fresh coders discover the delights of a random number generating program, spruce it up a bit with a bit of colour, and then release the results into the public domain as Bingo Calling programs. Are they just chancers, or optimistic?

Crossword compilers

Check out any public domain library's catalogue, and you're bound to come across one of these blighters sooner or later. The best (like *Crossword Compiler*, reviewed last issue) have massive dictionaries which allow you to find words with, say R as the fifth letter and Q as the ninth (*in what language? – Dave*), allow you design the grids and automatically place the clue numbers. Others, er, don't.

Controlling the entire US Star Wars space project

Now believe it or not... (*er, that's enough weird uses for the CPC – says Dave in an entirely ripped-off-from-Empire sort of a way. – Dave*).

Hardware to swallow

I'm not speaking to Simon. He's managed to swing it so that he writes about the Red Boxes and there's not much which can compete on the downright pointless scale with those. But CPC hardware suppliers have had a good go...

The 3.5-inch goal

As a large proportion of CPC companies seems to be obsessed with the ins and outs of the 3.5-inch drive, it's only fitting that there have been one or two heroic failures in this area. Any drive without a side-switch, for a start, automatically gets bumped up one or two points on the Uselessometer. SD Microsystems recognised this, and went one better by providing a three-position side-switch: side A, side B, and a 'double-sided' setting for 800k formats. Never mind that every other drive can cope with double-sided formats on the side A setting...

And remember the MicroStyle Megadrive From Avatar (or was it Microstyle?); not a Sega in disguise, but a 3.5-inch drive with more flashing red lights than any other (designed to appeal to the Capri contingent). Despite numerous orders at £70 each, none were ever made...

Hard drivin'

Campursoft, Siren and Quantum have all been at one point putative hard drive manufacturers. We know you all want one, but why? Can anyone actually think of a use for it? PC games and utilities are frequently designed for them, but there'd never be enough CPC owners with a hard drive to justify anyone writing hard drive-only software. Besides, CPCs already have the capability for instantaneous access to their favourite programs – in the shape of ROMboards, which only the BBC Micro also provides.

Comms

The one use for a hard drive would be running a bulletin board, so that all the messages and downloadable files could be stored on it – and even then, you're better off with a cheap PC. In fact, comms has always brought out the useless in hardware designers. Take the dual-port serial interface sold by Cirkit and Avatar, which lets you connect your CPC to two modems at once. Do you have two modems? Do you have two telephone lines? In fact, do you even know two CPC users with a modem?


The GX4000 – prize-winning useless lump of plastic.

Not that Amstrad's own serial interface was much better; not content with giving you two ROMs of cruddy comms software, it would load each ROM's workspace into memory twice if you were particularly unlucky.

A good read?

At this point, let's shed a tear for magazines past. Not *Computing with the Amstrad*, a magazine so obsessed with its publishers (Database) that nine news stories in one issue were devoted to the company. Nor *Amstrad Computer User*, the official rag, because it used to be quite good before, er, Robert Maxwell bought it. And not *AA*'s final challenger, *CPC Attack!*, which despite promising circulation, interesting editorial, large numbers of advertisers and cartoons of 'Amy Stradivarius' all over the place, was suddenly and unexpectedly closed by its publishers when they couldn't be bothered to find a new editor.

No, the magazine we'll really miss is European. France's *Amstrad Cent Pour Cent* was responsible for some of the most useless hardware ever – in the form of their occasional spoofs. 'Incroyable!' screamed one front page, and the magazine went on to describe Amstrad's incredible new range of CPCs – a portable, a ghettoblaster lookalike, a see-through machine à la Swatch. Perhaps they were following in the footsteps of the French computer weekly *Hebdogiciel*, which ran a scoop story on the Amstrad CPC 5128; a new 6128 with a built-in 5.25-inch drive. Amstrad were not amused.


CPC644 – did you buy one just a month too early?

The masters

Strange, really, because they've come up with their own share of useless machines. Although I'm the proud owner of a faithful 664 and it fulfils all my CPCing needs, if you were one of the original 664 owners who saw their machine supplanted a few months later by the sleeker and more powerful 6128, you'd consider the thing pretty useless. Surely Amstrad could do no worse?

Wrong. Next came the Home Entertainment Centre, an over-priced bundle of CPC, clock radio and tuner to transform your monitor into a TV. Nice idea, but try listening to the radio while your CPC's switched on... bzzzz, fzzzzzz. Everyone bought Amigas instead.

So Amstrad put a new case on the CPC to make it look like an Amiga, souped up the graphics and sound a bit, added a few extra serious features... the CPC Plus was born, and with it, the £99 GX4000 console. You wonder why they bothered, though. At last, there was an 8-bit printer port, but it required such hacking to work properly that no-one bothered. The graphics were nice, true, but could you access them from your own programs? Not easily.

Few authors wrote games for the machine at all, of course. In '84, when the 464 was launched, computers were being released left, right, and centre to challenge the then-dominant Spectrum. Remember the Oric, the Dragon, the Jupiter Ace? All contenders for the title of most useless hardware. Amstrad seized upon the simple truth which most companies had ignored, namely that a computer is useless if no software is available for it. So they launched Amsoft, whose games were bad in most cases (*Roland on the Ropes* was about the best they got), but at least they existed.

The GX4000

It was a shame for Plus owners to see Amstrad forgetting this the second time around, but at least they could use most (although not all – well done, Amstrad) normal CPC programs. GX4000 owners, on the other hand, could do very little apart from play *Burnin' Rubber*, *Robocop 2* and *Pang*. They could play *Operation Thunderbolt*, *SCI* or *No Exit*, but chances are they wouldn't want to. **Richard**

Assembly Line

It's not the second part of a two-part feature, as Simon Forrester goes off at a tangent and decides that we all really ought to know 6128 firmware specifics instead.



Sorry, 464 owners, but it's a 6128-specific month, I'm afraid.

We interrupt this two-parter on integrating BASIC with machine code for a special information session.

After a number of phone queries from readers, the powers that be (me) have decided that old 464 users can tittle for this month. We're dealing with firmware specific to 664s and 6128s this month.

Without further ado, let's get on with the Hairy Miniature Firmware Guide's introduction to ROM version 1.1. Here we go:

&BD3A – KM set locks

When version 1.1 was created, it gained quite a few extra little bits and pieces, one of which was the ability to turn caps and shift locks on and off (a glaring oversight in version 1.0 if you ask me). This routine works with **HL**, H controlling caps and L controlling shift. To turn a lock on, the register must contain **&ff**, whereas to turn it off you'll need a **&00**.

This routine corrupts the A and F registers, meaning the accumulator and every flag.

&BD3D – KM flush

Another brilliantly useful routine, this is a firmware jump to clear the key buffer. If you've got some tool using your program who's bound to press too many keys, you can cancel out everything he's pressed with KM Flush, so he won't trigger other parts of the program before he's even got to them.

This routine corrupts the A and F registers, meaning the accumulator and every flag.

&BD40 – TXT ask state

This is another little saviour of a firmware call (*you like it then? – Dave*), giving you the full status of the cursor. There are no entry conditions, but on exit the different bits of the accumulator can mean different things when set:

- 0 – The cursor is disabled
- 1 – The cursor is turned off
- 7 – The VDU is enabled

&BD43 – GRA default

Dead simple – there are no entry conditions, as this one simply returns the graphics bits and pieces to their default states (origins, pens, etc). Every register hits the dirt when you use it, though.

&BD46 – GRA set back

Another easy one, as this firmware call simply sets the graphic background to either opaque (**&00**) or transparent (**&ff**), a value which is passed in the A registers. It leaves all of your other registers well alone, though.

&BD49 – GRA set first

How's this for an odd one? It determines whether the first pixel of DRAWn lines is plotted or not. This is handy for fine maths work, but I can't really see the point myself. On entry, the accumulator holds **&00** if there's no pixel, and **&ff** if there is one.

&BD4C – GRA set line mask

It's superbly handy firmware time again, with a call that creates masks for dotted lines. Your byte is split up into bits that describe the dots of a line (**&x11101110**, etc). The mask is passed in the accumulator, and no other registers are touched.

&BD4F – GRA from user

If you're having problems calculating real co-ordinates with the origin system, this call will take the X and Y co-ordinates (held in **DE** and **HL** respectively) and convert them into real co-ordinates (returned in the same registers). **AF** will corrupt.

&BD52 – GRA fill

This command is simple to use in BASIC, but a real problem in machine code (which is probably why the BASIC FILL command is so hideously bugged). When you call it, **A** contains the pen number to fill with, but **HL** and **DE** contain the address and length of a buffer. This buffer is used when there are more complex shapes to fill, each basic shape taking seven bytes of space. If the routine runs out of memory, the carry flag will be false.

&BD55 – SCR set position

Don't worry too much about this one. It allows you to set the screen offset (which the CPC uses as it scrolls) without the hardware finding out. If you're careful you'll never need to use it, but **A** must contain the screen base (**&c0** normally) and **HL** must contain the screen offset. The easiest way to understand this call is to try it out. Do that.

&BD58 – MC print translation

This command enables you to set up a translation table of printer characters. Your table must be no more than 20 entries long, each entry consisting of two bytes – the ASCII code sent to the printer by the user, followed by the ASCII code you'd like to send instead. Dead, as they say, useful. you set **&ff** as the second byte, no character is sent.

&BD5B – KL bank switch

And finally, we have the bank-switching command, using codes sent in the accumulator. These codes are **&c0** for normal memory, and **&c4** to **&c8** for one of the four banks to be switched in at **&4000**. All flags corrupt on exit.

Next month

After this information-based page, we'll have to go for something tutorial-ish next month. In fact, I think I'll break with tradition and actually do something I originally intended to, such as integrating BASIC and machine code. Failing that, I won't. Have fun.

Type-ins

There's some great little programs here this month. Shame you'll have to put some effort in to use them, isn't it?

Base Converter

Nicholas Campbell presents with a program which converts numbers from one format to the other (from decimal to hex, for example). If you have any problems using the package, you're quite clearly stupid, as all the instructions are onscreen.

```
PDNA 10·DIM·m$(6):MODE·1:INK·0,0:BORDER·0:INK
     ·1,26:INK·2,6:INK·3,12:PAPER·0:PEN·2:LOC
     ATE·15,1:PRINT"Base·Changer":PEN·3:LOCAT
     E·6,2:PRINT"by·Nicholas·Campbell·23/11/9
     3":WINDOW·1,40,4,23:WINDOW#1,1,40,25,25:
     PEN·1:PAPER#1,0:PEN#1,2:CLS#1:WHILE·INKE
     Y$()"":WEND
KDMB 20·CLS:RESTORE:FOR·m=1·TO·6:READ·m$(m):L
     OCATE·11,(m*2)+2:PEN·2:PRINT·m;CHR$(8)".
     ·";:PEN·1:PRINT·m$(m):NEXT:i$="":WHILE·i
     $("1"OR·i$)"6":i$=INKEY$:WEND:i=VAL(i$):
     LOCATE#1,(40-LEN(m$(i)))/2+1,1:PRINT#1,m
     $(i):ON·i·GOSUB·30,40,40,40,60,60:GOTO·2
     0
HDDP 30·CLS:IF·i=1·THEN·INPUT"Enter·hex:·&",h
     $:PRINT:IF·LEN(h$)=0·OR·LEN(h$))4·THEN·3
     0·ELSE·d=VAL("&"+h$):PEN·1:PRINT"Decimal
     :";:PEN·2:IF·d)-32769·AND·d(0·THEN·d=655
     36+d:PRINT·d:GOSUB·80:RETURN·ELSE·PRINT·
     d:GOSUB·80:RETURN
PDFB 40·CLS:IF·i=2·THEN·INPUT"Enter·decimal:·
     ",d:PRINT:IF·d(0·OR·d)65535·THEN·40·ELSE
     ·h$=HEX$(d,4):PRINT"Hex:·";:PEN·2:PRINT"
     &"h$:GOSUB·80:RETURN·ELSE·IF·i=3·THEN·IN
     PUT"Enter·hex:·&",h$:PRINT:IF·LEN(h$)=0·
     OR·LEN(h$))4·THEN·40·ELSE·b$=BIN$(VAL("&
     "+h$))
JDFO 50·IF·i=3·THEN·PRINT"Binary:·";:PEN·2:PR
     INT"&X"b$:GOSUB·80:RETURN·ELSE·IF·i=4·TH
     EN·INPUT"Enter·binary:·&X",b$:PRINT:IF·L
     EN(b$)=0·OR·LEN(b$))16·THEN·40·ELSE·h$=H
     EX$(VAL("&X"+b$)):PRINT"Hex:·";:PEN·2:PR
     INT"&"h$:GOSUB·80:RETURN
AEMN 60·CLS:IF·i=5·THEN·INPUT"Enter·decimal:·
     ",d:PRINT:IF·d(0·OR·d)65535·THEN·60·ELSE
     ·b$=BIN$(d):PRINT"Binary:·";:PEN·2:PRINT
     "&X"b$:GOSUB·80:RETURN·ELSE·IF·i=6·THEN·
     INPUT"Enter·binary:·&X",b$:PRINT:IF·LEN(
     b$)=0·OR·LEN(b$))16·THEN·60·ELSE·d=VAL("
     &X"+b$)
ABMI 70·IF·i=6·THEN·PRINT"Decimal:";:PEN·2:PR
     INT·d:GOSUB·80:RETURN
CEDN 80·PRINT:PEN·3:PRINT"Press·any·key·to·co
     ntinue...":WHILE·INKEY$()"":WEND:CALL·&B
     B18:CLS#1:WHILE·INKEY$()"":WEND:RETURN:D
     ATA·Hex·to·Decimal,Decimal·to·Hex,Hex·to
     ·Binary,Binary·to·Hex,Decimal·to·Binary,
     Binary·to·Decimal
```

Disc Office 2

Non-6128 owners beware – this is a 6128 only package, to carry out all those tiresome disc operations that have proved so dangerous in the past (*hold on – dangerous? – Dave*). You need worry about losing your fingers no longer (*this is a side to the CPC I haven't seen before – Dave*).

```
JANJ 1·'·Disc·Office·II··©·N.C.·(12¾)·1992
PBAG 2·'·24·Ballyminstragh·Rd.,·Killinchy,···
     ····Newtownards,·Co.Down,···············
     ····Northern·Ireland,·BT23·6RE.
KAEM 3·KEY·9,"MODE·2:CALL·&BC02:PEN·1:LIST"+C
     HR$(13)
DAIK 5·POKE·&BDEE,&C9
MAAA 10·MODE·1:BORDER·20:INK·0,20:INK·1,0:INK
     ·2,2:INK·3,14
CABO 20·CALL·&BB4E
IAMC 30·WINDOW#1,1,40,1,3:PAPER#1,2:CLS#1
FBIF 40·FOR·P=1·TO·3:PRINT#1,STRING$(40,207);
     :NEXT:LOCATE#1,1,2:PEN#1,0:PRINT#1,CHR$(
     22)CHR$(1);
PABO 50·PRINT#1,"Disc·Office·II··©·Nicholas·C
     ampbell·1992"
HAAK 60·LOCATE·1,5:PEN·3:PRINT"MENU"
KADF 70·LOCATE·21,5:PEN·3:PRINT"INSTRUCTIONS"
CAHM 80·GOSUB·690
IAGL 90·WINDOW·1,19,7,25:WINDOW#2,21,40,7,21
DDDI 100·mn$(1)="1)·Rename·File":mn$(2)="2)·E
     rase·File":mn$(3)="3)·User":mn$(4)="4)·D
     rive":mn$(5)="5)·Format·Disc":mn$(6)="6)
     ·Catalogue·Disc":mn$(7)="7)·Run·Program"
     :mn$(8)="8)·Exit·Program"
DACA 110·PEN·1:CLS
KAEJ 120·FOR·m=1·TO·8:PRINT·mn$(m):PRINT:NEXT
NAFI 130·LOCATE·1,18:PEN·3:INPUT"Enter·select
     ion:",k
JAKE 140·ON·k·GOTO·160,230,280,330,400,530,58
     0,641
CADK 150·GOTO·130
CACP 160·GOSUB·650
IBJM 170·PRINT#2,"Which·file·to":PRINT#2,"ren
     ame?·Specify·the·";"extension·as·well."
DANM 180·INPUT#2,"",o$
NABA 190·PRINT#2:PRINT#2,"Old·Name=":PRINT#2,
     UPPER$(o$)
LAFH 200·PRINT#2:PRINT#2,"New·Name=":INPUT#2,
     "",n$
FACA 210·|REN,n$,o$:CLS#2
CAPJ 220·GOTO·110
CAAP 230·GOSUB·650
IBPH 240·PRINT#2,"Which·file·to":PRINT#2,"era
     se?·Specify·the··";"extension·as·well."
DABM 250·INPUT#2,"",e$
EACD 260·|ERA,e$:CLS#2
CAEK 270·GOTO·110
BABP 280·CLS#2
MANH 290·PRINT#2,"Current·User="PEEK(&A701):P
     RINT#2
IAKO 300·INPUT#2,"Enter·New·User:",u
DADK 310·POKE·&A701,u
CAAK 320·GOTO·110
BANO 330·CLS#2
JAEL 340·IF·PEEK(&A700)=0·THEN·d$="A"·ELSE·d$
     ="B"
KAIO 350·PRINT#2,"Current·Drive="d$:PRINT#2
JAAN 360·INPUT#2,"Enter·New·Drive:",dr$
DAGN 370·|DRIVE,dr$
CAKH 380·dr$=d$
CAHK 390·GOTO·110
BALO 400·CLS#2
ABGL 410·PRINT#2,"[V]endor·or·[D]ata":PRINT#2
     ,"only·format?"
DABM 420·INPUT#2,"",f$
```

A FONT OF YOUR VERY OWN

Don't settle for those drab old fonts – create your own and get a bit silly (Dave Crookes who does the Further Reading column is column is probably going to hate me for this – he'll have month's of fanzines filled with silly fonts after this).

This little lot come courtesy of Chris Morgan, a name you'll have seen in this column a few times before. As a sort of general workshop thing, we're going to take a look at exactly how these programs work at the end of this box-out, but for now we'll just get on with the seven different programs. To use each one simply type it in and run it, and if you come across any Memory full or Improper argument error messages, you simply need to save the program, reset your machine and try running it again. Take it away, Chris:

3D

```
GAEB 5·'·by·Chris·Morgan
EAOG 10·SYMBOL·AFTER·32
IANG 20·FOR·a=HIMEM·TO·HIMEM+767·STEP·8
DAFH 30·FOR·b=1·TO·8
EBBG 40·b$=BIN$(PEEK(a+b),8):b$="0"+LEFT$(b$,
     7):c=INSTR(b$,"1"):IF·c)2·THEN·MID$(b$,c
     -2,1)="1"
FAFJ 50·POKE·a+b,VAL("&X"+b$)
DAOD 60·NEXT:NEXT
```

Backwards

```
GAAE 10·'·by·Chris·Morgan
EADH 20·SYMBOL·AFTER·36
GAAL 30·FOR·a=HIMEM·TO·HIMEM+703
FANF 40·b$=BIN$(PEEK(a+b),8)
MAIK 50·c$="":FOR·c%=8·TO·1·STEP-1:c$=c$+MID$
     (b$,c%,1):NEXT
FAKA 60·POKE·a,VAL("&X"+c$)
BAGM 70·NEXT
```

Inverse

```
GAAC 10·'·By·Chris·Morgan
BBPA 20·SYMBOL·AFTER·32:FOR·a=HIMEM·TO·HIMEM+
     767:POKE·a,255-PEEK(a):NEXT
```

Italics

```
GAAE 10·'·by·Chris·Morgan
PBNK 20·SYMBOL·AFTER·32:FOR·a=HIMEM·TO·HIMEM+
     767·STEP·8:FOR·b=1·TO·8:IF·b(4·THEN·a$="
     0"+LEFT$(BIN$(PEEK(a+b),8),7):POKE·a+b,V
     AL("&X"+a$)
DAND 50·NEXT:NEXT
```

Underlined

```
GAAE 10·'·by·Chris·Morgan
MAGJ 20·SYMBOL·AFTER·33:FOR·a=HIMEM·TO·HIMEM+
     759·STEP·8
EAEH 30·POKE·a,255:NEXT
```

Smudged

```
GAAE 10·'·by·Chris·Morgan
EAPG 20·SYMBOL·AFTER·32
IAOG 30·FOR·a=HIMEM·TO·HIMEM+767·STEP·8
FAEC 40·FOR·b=1·TO·8·STEP·2
JADI 50·b$=BIN$(PEEK(a+b),8):b$="0"+LEFT$(b$,
     7)
FAGJ 60·POKE·a+b,VAL("&X"+b$)
DAPD 70·NEXT:NEXT
```

```
OALP 430·f$=UPPER$(f$):IF·f$="V"·THEN·b=&41·E
     LSE·IF·f$="D"·THEN·b=&C1
CAOE 440·c=&8035
DALK 450·FOR·a=1·TO·9
KALO 460·POKE·c,0:POKE·c+1,0:POKE·c+2,b:POKE·
     c+3,2
KAJH 470·c=c+4:b=b+2:IF·(b·AND·&F)=&B·THEN·y=
     y-9
BALP 480·NEXT
EBHP 490·PRINT#2:PRINT#2,"Insert·disc·and":PR
     INT#2,"press·any·key.":CALL·&BB18
DAEA 500·CALL·&BB18
GAGK 510·CALL·&8000:CLEAR:GOTO·110
BAOI 520·END
DALA 530·CLS:CLS#2
CAPP 540·PEN·1:CAT
BBPB 550·PRINT#2,"Press·any·key·to":PRINT#2,"
     return·to·menu."
DAKA 560·CALL·&BB18
CAHK 570·GOTO·110
CAIP 580·GOSUB·650
JBBE 590·PRINT#2,"Which·program·do·you";"want
     ·to·run?·Specifyextension·as·well."
DALM 600·INPUT#2,"",p$
KAME 610·IF·LEN(p$)>8·OR·LEN(p$)<=0·THEN·GOTO
     ·600
CAKJ 620·PRINT#2
MAME 630·PRINT#2,UPPER$(p$):PRINT#2,"is·loadi
     ng..."
CADG 640·RUN·p$
NAIL 641·MODE·1:CALL·&BC02:CALL·&BB4E:POKE·&B
     DEE,&C3:POKE·&A701,0
LBDG 642·PRINT"Disc·Office·II··©·Nicholas·Cam
     pbell·1992"SPC(15)"Bye-bye!!":PRINT:PRIN
     T"·BASIC":PRINT
BAHK 643·NEW
DAOA 650·CLS:CLS#2
CBNG 660·PRINT#2,"Insert·disc·and":PRINT#2,"p
     ress·any·key.":PRINT#2
GAIK 670·CALL·&BB18:PEN·1:CLS:CAT
CAOJ 680·RETURN
JAHK 690·WINDOW#2,21,40,6,21:WINDOW#3,21,40,2
     3,25
EANB 700·PEN#2,1:PEN#3,2
HBJA 710·PRINT#3,"Hello·to·Rob·&·Sean!";"-·th
     is·program·has··been·donated·to·PD."
CAJJ 720·RETURN
DAJA 730·CALL·&BB18
AACO 740·'
```

Territory

Now this one isn't what we'd call a full game (*is it what we'd call a game at all, though? – Dave*). In fact, it's more of a subgame. If you've written a program you think needs pepping up a bit, just drop this little 8-liner in and see what kind of reaction you receive (while I run away).

```
CCDB 10·'·Territory·-·a·little·sub-game·that·
     you·can·MERGE·into·another·BASIC·program
     ·and·run·at·any·time!
NDJE 20·KEY·9,"RUN·10000"+CHR$(13):MODE·1:INK
     ·0,0:BORDER·0:INK·1,26:INK·2,11:INK·3,6:
     PAPER·0:PEN·1:PRINT"Territory···"CHR$(16
     4)"·Nicholas·Campbell·23/11/93":PLOT·0,0
     ,1:DRAW·639,0:DRAW·639,364:DRAW·0,364:DR
     AW·0,0:WINDOW·2,39,4,24:CLS:it=2:SYMBOL·
     AFTER·255
HCDM 30·SYMBOL·255,255,247,183,227,183,183,18
     5,255:x1=1:x2=38:y1=9:y2=9:IF·it=2·THEN·
     p1$=CHR$(255):p2$=CHR$(143):t=TIME·ELSE·
     IF·it=3·THEN·p1$=CHR$(143):p2$=CHR$(255)
     :t=TIME
NCEO 40·LOCATE·x1,y1:PEN·2:PRINT·p1$;:LOCATE·
     x2,y2:PEN·3:PRINT·p2$;:IF·x1=x2·AND·y1=y
     2·THEN·80·'·if·it=2·then·"it"·is·Player·
     1·(blue);·if·it=3·then·"it"·is·Player·2·
     (red)
NDEL 50·LOCATE·x1,y1:PRINT"·";:LOCATE·x2,y2:P
     RINT"·";:IF·INKEY(63)>-1·AND·x1>1·THEN·x
     1=x1-1·ELSE·IF·INKEY(62)>-1·AND·x1<38·TH
     EN·x1=x1+1·ELSE·IF·INKEY(69)>-1·AND·y1>1
     ·THEN·y1=y1-1·ELSE·IF·INKEY(71)>-1·AND·y
     1<21·THEN·y1=y1+1·'·Check·keys·for·Playe
     r·1
DDHI 60·IF·INKEY(8)>-1·AND·x2>1·THEN·x2=x2-1·
     ELSE·IF·INKEY(1)>-1·AND·x2<38·THEN·x2=x2
     +1·ELSE·IF·INKEY(0)>-1·AND·y2>1·THEN·y2=
     y2-1·ELSE·IF·INKEY(2)>-1·AND·y2<21·THEN·
     y2=y2+1·'·Check·keypresses·for·Player·2
OBPI 70·GOTO·40·'·Controls·are:·Player·1·(blu
     e)·-·A·Up·Z·Down·X·Left·C·Right,·Player·
     2·(red)·-·cursor·keys
AEEN 80·t=(TIME-t)/300:CLS:PEN·it:LOCATE·16,4
     :PRINT"Player";it-1:PEN·1:PRINT:t$="You·
     caught·the·other·player·in"+STR$(ROUND(t
     ,2)):LOCATE·(40-LEN(t$))/2,7:PRINT·t$:LO
     CATE·16,8:PRINT"seconds!":PRINT:IF·it=2·
     THEN·it=3·ELSE·IF·it=3·THEN·it=2
CDJD 90·LOCATE·13,10:PRINT"Press·any·key":FOR
     ·pause=1·TO·1200:NEXT:WHILE·INKEY$<>"":W
     END:CALL·&BB18:CLS:GOTO·30·'·Territory·c
     an·be·used·with·"Flik"·by·Richard·Moulto
     n·as·well!
```

Vertical

```
GAAE 10·'·by·Chris·Morgan
BAHP 20·MODE·0
EABH 30·SYMBOL·AFTER·33
IAJG 40·FOR·a=HIMEM·TO·HIMEM+752·STEP·8
LAMB 50·FOR·b=0·TO·7:n$(b)=BIN$(PEEK(b+a+1),8
     ):NEXT
DAIH 60·FOR·b=1·TO·8
GAPH 70·n$="":FOR·c=7·TO·0·STEP-1
HANA 80·n$=n$+MID$(n$(c),b,1):NEXT
FAFK 90·POKE·a+b,VAL("&X"+n$)
CAPP 100·NEXT·b,a
```

SO HOW DOES IT ALL WORK, THEN?

Good question. All we need now is a good answer. To understand the way font altering programs work, we have to know how the CPC handles its character set. When we issue a SYMBOL AFTER command, the characters we asked for are stored straight after HiMem, in the same number form we'd use to enter them is we used the SYMBOL command (bitwise).

So if, say, you wanted to invert your entire character set (well, you never know), you need to follow these simple steps.

1 Move the character set to an accessible place in memory using, say, `SYMBOL AFTER 32`. This will place the eight bytes for every character including and after 32 straight after HiMem. The address of the first byte is therefore HiMem+1.

2 Alter every character between 32 and 127, making 95 characters in total. Each character has eight bytes, so you need to alter (95x8) 760 bytes in total.

3 Now you need to perform your bitwise operation on the bytes, in this case not caring which character they belong to. In the example you've chosen to invert each byte, so you can simply subtract the value from 256. This is a totally non-standard way of doing things, but it works because you're using binary:

```
00001010 = 10
256-10=246
11110101 = 246
```

4 Now simply loop to step 3 until all 760 bytes have been altered.

Typing listings

If you've never typed in a listing from *AA* before, then reading the following blurb is a REALLY GOOD IDEA.

- Basically, all you need to do is make sure you type in exactly what we print EXCEPT the first four letters in each line.
- The first four letters are a code which work in conjunction with our unique and utterly excellent *TypeChecker* program below.
- Only press RETURN when you get to the end of a command line. If a command line goes on to two lines do not press RETURN at the break in the line. Your lines on screen should break in exactly the same place as they do in the mag.
- The dots you see in some lines (like the one between well and done in `PRINT"Well·done"`) indicate spaces. The dots are there so that you don't have to guess how many spaces to put in when there are more than one.

TypeChecker

This program lets you to check whether you've typed *AA* listings in correctly. Type it in, then SAVE it for future use. When you want to double check that you typed a listing in correctly:

- Load up *TypeChecker*.
- Type NEW.
- Type in the listing of your choice.
- When you've finished type LIST.
- At the end of every line a highlighted code will appear. It should correspond with the code printed in front of the same line in *AA*. If it doesn't you have typed in that line incorrectly.

```
PAML 10·'·TypeChecker·V1.0·-·By·Simon·Forrest
     er·-·Dec·1992
MAOJ 20·'·For·Amstrad·Action·-·Public·Domain
DANK 30·MEMORY·&9FFF
CAJK 40·csum=0
GAME 50·FOR·addr=&A000·TO·&A05B
DAKJ 60·READ·byte$
GAJB 70·byte=VAL("&"+byte$)
FACF 80·POKE·addr,byte
GAFB 90·csum=csum+byte
DALK 100·NEXT·addr
OACI 110·IF·csum<>&2ADD·THEN·PRINT·"Checksum·
     Error":END
LANE 115·POKE·&A001,PEEK·(&BB5B):POKE·&A002,P
     EEK·(&BB5C)
KAHI 120·POKE·&BB5A,&C3:POKE·&BB5B,&3:POKE·&B
     B5C,&A0
MACN 130·PRINT·"TypeChecker·V1.0·Installed":E
     ND
MABC 140·DATA·CF,FE,93,FE,0A,CA,00,A0,F5,C5,D
     5,E5,FE,0D,CA,22
LACJ 150·DATA·A0,5F,16,00,2A,5A,A0,19,22,5A,A
     0,E1,D1,C1,F1,C3
LAFJ 160·DATA·00,A0,3E,20,CD,00,A0,3E,18,CD,0
     0,A0,2A,5A,A0,7C
LADI 170·DATA·CD,45,A0,7D,CD,45,A0,3E,18,CD,0
     0,A0,21,00,00,22
LACN 180·DATA·5A,A0,C3,1B,A0,F5,E6,0F,C6,41,C
     D,00,A0,F1,E6,F0
KAJC 190·DATA·1F,1F,1F,1F,C6,41,CD,00,A0,C9,0
     0,00,END
```

Turning *TypeChecker* off (it is automatically initialised when you RUN the program above) and back on again is quite simple:

```
POKE &BB5B,0      To turn it off
POKE &BB5B,3      To turn it back on again
```

Isn't science amazing? (Now don't argue.)

READER ADVERTS

It's the Harrods of bring-and-buy – the CPC second-hand superstore where bargains are ten a penny (well, almost).

FOR SALE

CPC464, colour monitor, two DD1-1 disk drives, complete with interface and 10 disks. Tasword, Tasprint and spellchecker on disk. 17 games plus programs plus Amstrad Basic 1 & 2. 100 mags and AA covertapes. Phone 0233 660379.

About 70 tape games for sale, from 50p to £2. All great games. Also Multiface 2 for sale for £12. Also DES ROM chips and MicroDesign. For list send SAE to Kristy Smith, 16b High Street, Saxmundham, Suffolk IP17 1DD.

Amstrad CPC464, £75ono, with one joystick, plus games ranging from £1 to £5. Phone 0908 671566 after 7pm.

Amstrad CPC6128 with colour monitor, joystick, manual, vgc. £80. Phone 0268 780254.

Amstrad CPC6128 Plus, colour monitor, Citizen 120D printer, two cart games, disc and tape drive. Lots of software. Bundle worth over £800! Will sell for £330ono. Julien Lamb 0703 265369 (Hants).

CPC6128, colour monitor, 3.5-inch disk drive, printer, mouse, tape deck, Supercalc 2, Mini Office 2, lots of software on disk, serious and games. Phone David on 0708 752972.

Excellent value! CPC6128 with colour monitor, Multiface 2, joystick, Advanced Art Studio, Equinox, magazines and loads of games complete with all manuals. Everything in excellent condition. Will split. £150. Phone 0234 870571.

CPC464, keyboard, colour monitor, joystick, user manuals, over 50 games, 25 Amstrad Actions with covertapes, all vgc. £100ono. Contact Lisa on 0854 613212.

Offers required for serious software for CPC6128: Advanced Musik System, Stop Press, EMR MIDITrack Performer, MIDITrack editor. For details contact Graham George on 0222 811056 – answerphone also available.

Galactic Warfare version 4.6, strategic wargame, two players, two scenarios, various spaceships, missiles, ground units, hidden movement, m/code, keyboard/joystick, save game. P Gardner, 2 Crofton Road, North End, Portsmouth, PO2 ONT. £2 plus disk/C20 tape plus SAE.

CPC464 tapes, £1.50 each. Including Fly Spy, Batman, Daly Thompson, Roland in the Caves, Tel Gary Ingram 0794 517151.

ROMboard Super ROMPlus holds up, to 15 ROMS with instructions. £12, PJ Gardner, 2 Crofton Road, North End, Portsmouth, PO2 ONT. 0705 679642 7.30pm-9.30pm.

Magazines, games, books for CPCs for sale (including Soft 158 Firmware Guide). Second hand, good condition. Send SSAE for list to A Swinbourne, 11 Vicarage View, Redditch, Worcs B97 4RF. Phone 0527 68419.

Do you own a CPC464? Why not upgrade to a CPC6128? Complete with Multiface 2, colour monitor, Advanced Art Studio, games, excellent condition. All for £150. Andrew 0234 870571.

CPC6128, colour monitor, DMP2000 printer, manuals, games, Mini Office 2, Cashbook Accounts, vgc, £150. Phone 071 266 9534 (eves). Buyer to collect.

40 games for the 464. All in good condition. Will sell separately. For list write to Miss Easton, 92a South Coast Road, Peacehaven, East Sussex, BN10 8SL.

CPC6128 software: Mini Office 2, Micro maths (GCSE), Loopz Collection, F15 Flight Eagle, £5 each. Joystick £3. 1993 AAs £1 each. Manual for 6128 £5. Tape games 50p each. Everything for £25. Martin 0942 43702.

MAKE YOUR AD STAND OUT

There's loads of text for a reader to wade through on these Reader Ad pages, so you really need to catch their attention if you want them to buy your bargains. Here are a few tips to get those browsers hooked:

- **Dare to be different! Witty or weird ads are bound to make their mark, but make sure it's clear what you're selling or what you want.**
- **Try to find some way in which your CPC6128 with colour monitor is a better barg than Joe Blogg's CPC6128 with colour monitor, and emphasise the fact in your ad.**
- **Write clearly – often we get ads in such bad handwriting we can't translate the addresses or telephone numbers – we tend not to print these.**
- **Make use of the fact that we make the first few words of each ad bold. Don't start your ad "For sale' or 'Wanted' – wade straight in telling them what you've got for sale.**
- **Also, make sure your ads make sense grammatically. Get someone else to read it to make sure they can understand what you're on about.**
- **Alternatively, you could just send us a cheque for £5, made payable to Future Publishing, and we'll stick your ad in a box like this one.**

Amstrad 6128 with colour monitor, TV tuner, cassette player, hundreds of games (cass and disc). Also Micro Design 2 and Mini Office 2. All boxed with manuals. Lots more. £350. Mike 061 432 0160.

CPC bargains – boxed original tapes and discs, also some add ons, eg, ROMbox, ROMs, Multiface, stereo module, etc. SAE for list. Eddie, 151 Balsusney Road, Kirkaldy, Fife, KY2 5LH (prices from 50p).

Amstrad CPC464 with green monitor, games, joypad, manual, (console in mint condition). £35ono. 0274 689967.

CPC6128, colour monitor, DMP2160 printer, TV modulator, cassette, leads, Light Gun, Music Making plus Foundation sequencer. Mini Office. Loads of games, tapes and discs. £275 the lot. Tel: 0524 425134. Steve (Morecambe), No splits.

CPC6128, colour monitor, ROMbox and contents, additional disk drive, lots of software including Protext plus manuals. £165ono. Phone 0273 842623 (Brighton area).

CPC6128, colour monitor, joysticks, word processor, educational games, blank discs, over 100 games on disk plus tape games. £200. Epson FX80 printer £50. 0932 353285 (Surrey).

Graduate Software CPM Plus ROMs £15. Protext ROM £10. ROMDOSXL ROM £15. Phone Ronald on Perth 0738 629536.

Soft 158, the complete CPC464 operating system firmware specification. Only £10ono or will swap for something. Contact Russell on 081 421 3521.

Green screen monitor, for the CPC6128 £25ono. Also green screen monitor for CPC464 £20ono. Will swap for something else. Contact Russell on 081 421 3521.

Sport strategy games (mainly football) and a few misc. 50p-£3 each, all on tape, all genuine and in cases. Moving into serious software. 0444 246170.

Amstrad CPC6128 set of system discs. CP/M Plus and Dr Logo and Help. £14 the pair. 0444 246170.

TV modulator for CTM644. Will pay up to £25. Phone Romi on 0932 349151 after 4pm.

CPC464, *colour monitor, disk drive, extra* memory. Over 100 games and Mini Office 2 on disc. Worth £250. Will accept £90. 071 720 5774.

CPC464 keyboard £25. Green screen monitor £25. Colour Monitor £50. Games 50p each. Joystick new and boxed £4. AEG Olympia, ESW 2500i daisywheel, RS232 or centronics £50. Ring 0883 715193.

Every issue of AA right from the start complete with all the covertapes. Best offer secures. Call Frank on 0956 348774. South London.

CPC tapes *(all original) from 50p. Also disk* software. Write with SAE for lists. Offers wanted for Rombo ROMbox with five ROMs. Eddie, Soft Options, 139 Commercial Street, Kirkaldy, Fife, KY1 2NS.

Cover tapes for sale. AA102, 103, 104 and 105. Only £1 each. Send SAE to Nadim Ali, 218F Blackstock Road, London, N5 1EA or phone 071 354 4502 after 5pm.

Tape and disc games for sale. All originals, including Lemming, Rampage, Batman, ATF and loads more. For list and prices send SAE to A Ratcliffe, 37 Parland Grove, Ashford, Middlesex TW15 2JB.

Blob Dodger game. 99 levels taking up a whole disc. Save planet Quadzerk from destruction. Send £2 and a 3-inch disc to Ratsoft, 37 Parkland Grove, Ashford, Middlesex, TW15 2JB. P&P included. Cheques payable to A Ratcliffe.

Amstrad MP1 modulator, brand new, never used, unwanted gift. Suitable for CPC464 to colour TV. Only £15. Tel Alan on 0733 313135 (evenings only).

DDI-1 disk drive for 464, only £45. GT65 monitor only £20. Printer lead £10. Two broken 464 keyboards £10 each. Simon 0254 831259.

Over 150 games, including Shadow Dancer, Rainbow Islands, Gremlins 2. £100 the lot. Dean, 15 Waterworks Street, Immingham, South Humberside, DN40 1AT.

CPC464, green screen, joystick, manual, over 100 games including Driller, Chase HQ, Man Unt, ATF, Operation Thunderbolt, Afterburner, WCLB, etc. All vgc. £70 the lot. Tel 0795 429285.

Amstrad CPC6128, colour monitor, 3-inch and 3.5-inch disc drives, DMP2000 printer, software includes Protext, Dbase, DTP, Batman, Spindizzy, Pool, Chess, Elite, Stormlord and more. Joystick, mouse and manuals included. Bargain! £280ono. Tel 0505 321185.

464 Plus, colour monitor, internal upgrade 128k, internal disc interface by Avatar, Multiface 2, manuals, over 20 AAs plus tapes, £125ono. Phone 081 554 7946.

CPC464 with colour monitor and DDI-1, plus 40 games. Excellent condition and working order. £230. Write to John Brock, 27 James Square, Crieff, Perthshire PH7 3EY or call round after 5pm.

Amstrad CPC6128 Plus, colour monitor, joystick, games, dust covers, manuals, excellent condition, £85ono. Tel 081 363 8376 after 5.30pm (North London).

Multiface 2 £25 plus p&p. AMX mouse and Stop Press £40 plus p&p. The Insider £5 plus p&p. 30 3-inch discs £30 plus p&p. Light Gun plus 10 games £25 plus p&p. Tel 0302 864730.

165 tape games, 10 compilations from 50p to £5. SAE Darren Littlewood, 33 Clay Flat Lane, Rossington, Doncaster, South Yorks, DN11 0AZ.

Star LC24-10 24-pin printer in perfect boxed condition £100 inc p&p. Tel 0302 864730.

CPC6128, mono monitor, Mini Office 2, lots of cover cassettes plus Amstrad Action mags, tape recorder, F16 Fighter Pilot, manual, all £100. Ask for Paul when you call 061 737 6845 after 7pm.

Amstrad 464 12k, green monitor, modulator, 3 and3.5-inch drives, Multiface, joystick, mouse, Star LC200 printer, tapes, discs, dust covers, mags, everything you'll ever need. £600 plus p&p ovno. Phone 0273 580296.

Amstrad 464, upgraded colour monitor, disc drives, ROMs, printers, software, mags, books, loads more. For full list send large SAE to D Small, 14 Meare Est, Wooburn Green, High Wycombe, HP10 0DX.

Continued on page 32 ➤

Buying goods through the post

There are loads of great bargains to be found in this Reader Ads section and the other adverts scattered through the magazine. But some of you might understandably be a bit reticent about sending money through the post for goods you haven't seen to somebody you've only talked to over the phone. But don't panic. Just follow our simple guide to buying goods by post to minimise any risks.

✉ Before ordering anything try to contact by phone to the person or company advertising the goods you want. Write down a list of questions you want to ask them – clarify the price, who will pay for delivery, compatibility, etc.

✉ Confirm a delivery date – ask how long you can expect to wait before the goods will be delivered (with official companies it should be within 28 days).

✉ Never send cash through the post. If possible use a credit card because it will probably give you some form of insurance. Failing that use a cheque or PO.

✉ Keep records of all correspondence and phone conversations with the people you're ordering stuff from.

✉ If a problem does occur, the first place to contact is the person or company you're ordering the goods from. Be calm and explain the problem clearly. Most faults are just mix-ups and can be sorted out.

✉ If, however, you continue to have problems write to us here at Advertising Complaints, *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW.

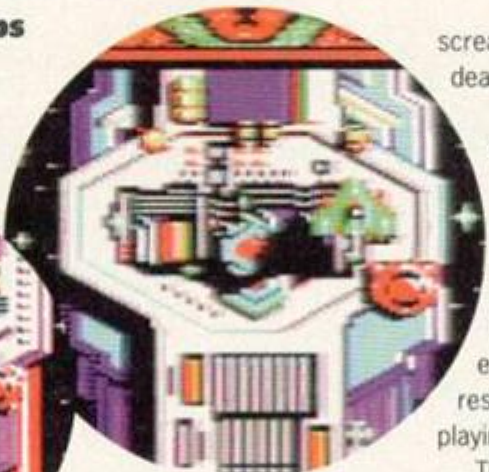


How many aliens can you fit in a Morris Minor?

Masters of Space

£TBA • Radical Software • ☎ 081 856 8402

If attacking heavily-armed alien motherships defended by hordes of attack craft on your tod sounds like your kind of thing Dave Golder suggests you either check in with a psychiatrist or check out this game...





You can fly right underneath the enemies.

Hang-gliding? Done that. Been there. Doing it tomorrow. Parachuting off mountains? Tried that. No sweat. Easy, man. Pepsi? Swigged it. Burped on the bubbles. Can't tell the difference from Sainsbury's brand. Single-handedly attacking massive alien motherships defended by hordes of fighter craft? Er, see you later...

I blame it all on *Star Wars*. Ever since Luke Skywalker single-handedly blew up a space station more heavily-armed than Millwall supporters at an away match computer games have had a fixation with lone spaceships battling against wave after wave of alien attackers. SF shoot-'em-ups are not so much a genre as a cliché. And guess what *Masters of Space* is? (If the name doesn't given it away check out the screen shots.)



Collect some serious fire power.

So, does it have anything new to offer? Can it justify its existence in a universe awash with SF shoot-'em-ups? Well, yes... just. Luckily, *Masters of Space* manages to carve out its own little individual niche, but not by coming up with any stunningly original concepts. Instead it combines a lot of familiar elements in a reasonably refreshing way.



Avoid some serious fire power.

You have to fly up and down the vertically scrolling playing area, swooping over the massive motherships which stretch for... oooh... screens. Basically you have to blow up all the mothership's defences, which include things like small attack ships and laser turrets, before you can progress onto the next level.

There's a time limit of one minute because you only have limited oxygen (well designed ship, this). But don't panic – when you blow up certain enemy ships they leave behind pick-ups which give you more oxygen plus extra fire-power. You can boost your weapons to an impressive level with bolts flying out from your ship in all directions – you wonder how any enemy ships could survive, but somehow one always manages to get through the wall of fire and kill you.

There's one problem: these pick-ups are delicate things, and to stop you blowing them up by mistake, when they appear your weapons are disabled until you pick them up. Talk about a double edged sword.

You have a great deal of control over the speed of your craft speed, which can make for some really quite exciting dog fights. But watch out that you don't go screaming into some deadly energy barrier.

Graphically, the dominant theme is colour, and lots of it; the game's got an appealingly stylised and cartoony look. It's a shame the over-elaborate border restricts the size of the playing area, though.

The game is divided into learner and difficult sections plus, for some bizarre reason, 'three extra short levels.' The trouble is that they're all virtually the same. Sure, they get more difficult, and the graphics change (minimally), but that's yer lot. It all gets a bit dull, frankly. The game's crying out for variety – bonus levels, end-of-level guardians, double-width motherships, a quick level of *Klax*, anything to change the pace or style of gameplay.

As it is, *Masters of Space* delivers the goods in the short term, providing high speed action and a few intriguing twists on the usual vertically scrolling shoot-'em-up formula. But it could badly do with a few more levels and lot more surprises. AA



VERDICT

GRAPHICS — 85%
Impressive in a colourful, bright, cartoony sort of a way.

SONICS — 78%
Well, it's not exactly a symphony in sound effects but pretty decent.

GRAB FACTOR — 85%
The power-ups and the speed of thing make it instantly appealing.

STAYING POWER — 70%
But it's desperately in need of variety and gets stuck in a rut.

FINAL RATING 75%

Mastering the Masters



This, believe it or not, means you're on the easy stage.

This shows the time limit until your oxygen runs out.

The power-up indicator – if there is a number here, then that shows how close you are to the pick-up. Two arrows (like here) mean you're right next to the pick-up.

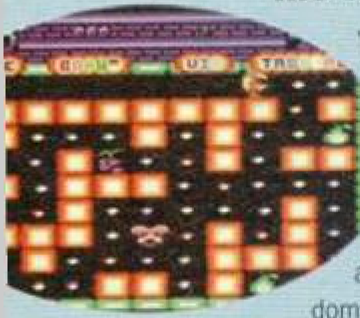
Shield power indicator – when it reaches the bottom, you're dead.

That'll be a pick-up then. Just fly slowly over it to get oxygen and extra fire power.

This is your ship, powerless at the moment because there's a delicate pick-up about.

Public Image

You don't get nowt for nowt, apparently. But while you work out how many negatives in that phrase cancel each other out, Keith Woods looks at the latest batch of PD software that'll cost you next to owt. Or is that nowt?



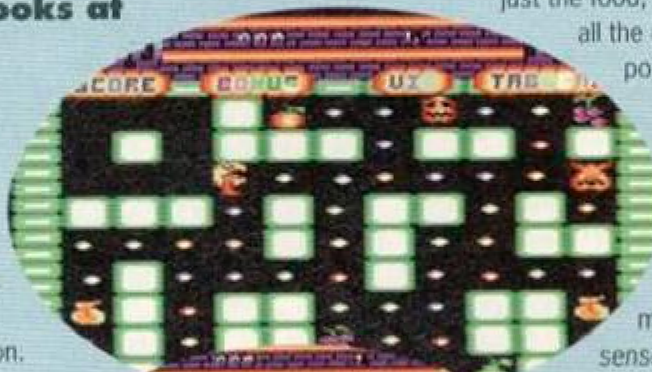
Like father like daughter.

Pac-Girl

By Le Chat Cyril

Decent *PacMan* clones are conspicuous by their absence in the CPC public domain. Most are just slow, BASIC-driven type-ins with the playability of a punctured football. So does *Pac-Girl* fill this gaping hole in the market?

Frankly, no. *Pac-Girl* does have some points in its favour, namely big colourful sprites and good presentation. However, the main sprite is one of the ugliest I've seen, and all the others merely move from square to square, as opposed to being properly animated. *Pac-Girl* doesn't have to eat all the dots on a screen to progress to the next level, just the food; but isn't eating all the dots the whole point of *PacMan*?





It's a constant battle against the bulge.

Two bad guys inhabit each level of the game, but their movements make little sense. They don't to try to trail you as you might expect, but rather they take a liking to one corner of the screen and it's very hard to convince them to vacate it. Of course, this can also mean that it's near on impossible to get at vital bits of food. Maybe there's a trick to getting around this problem, but I really couldn't generate enough enthusiasm to work it out.

Pac-Girl is one of the least inspired games to have emerged from the European scene. The author seems to have been more interested in lengthy intros, but after sitting through them all the game itself comes as a disappointment. Whatever gameplay *PacMan* had, it hasn't been inherited by his PD daughter.

70%

Plumpy

By Mickael Fauquet and Stephane Saint-Martin

Plumpy's a penguin with a problem – he's got the most voracious appetite, but his rather extensive larder's being raided and if he doesn't act soon he'll have nothing left to eat but that fluff-encrusted sweet that's spent the last six months in his right-hand pocket. So he decides to take his fat life in his hands and take on the raiders.

The raiders are very heavily armed; any contact with them and Plumpy will cease to be. Fortunately, though, he's armed with a highly effective weapon – his breath. No he doesn't have terminal halitosis – all Plumpy has to do to get rid of the raiders is blow a bubble in their direction, and they flee leaving their loot behind them.

Yes, you've guessed it, *Plumpy* is the PD's answer to the classic platformer *Bubble Bobble*, and although it lacks a Bub (or is it Bob?), *Plumpy* is actually quite a good answer at that. It's well presented, colourful and features some very speedy sprites (despite their plumpness).

There are only two enemies to kill on each level, but they're both of the intelligent variety – as opposed to just wandering around in set patterns, one of them follows your every move from the start, and the other tracks your movements right and left. The second enemy is actually the hardest to kill, as he won't be led up a platform to his death like the first one. Instead he remains resolutely at the bottom of the screen, and you'll need to be very quick to jump down and blow a bubble at him before he gets to you.



Yep, it's PD's answer to Bubble Bobble.



Only two enemies per level – but they're mean



Plumpy's the strangest-looking penguin I've ever seen.

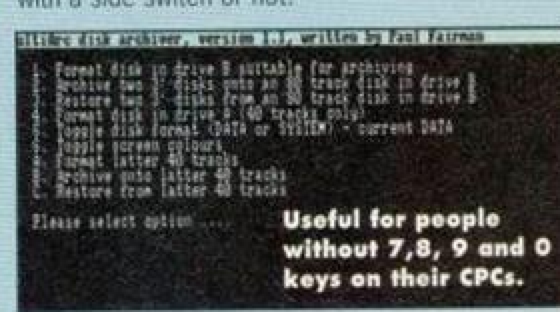
Plumpy is very well programmed and the presentation is impressive. It's a shame, then, that the programmers let this good work go to waste by providing a mere eleven levels. And that's where *Plumpy* falls down – it's great fun while it lasts, but unfortunately it doesn't last for very long at all. The nation demands more levels. The petition starts here.

74%

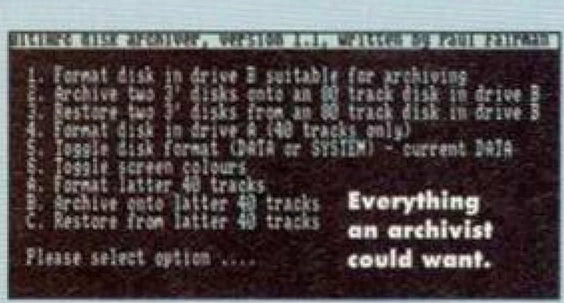
MultiArc

By Paul Fairman

MultiArc is a handy little utility for backing up 3-inch discs to higher capacity 3.5-inch or 5.25-inch discs. Two or four 3-inch discs will slot comfortably onto one high-capacity disc, depending on whether your second drive is fitted with a side switch or not.



Useful for people without 7,8, 9 and 0 keys on their CPCs.



Everything an archivist could want.

The program works by copying the discs, and can be used in either data or system formats. It performs as effectively and efficiently as you would expect. A handy feature is that the 80 tracks of the high-capacity disc are effectively split in two so that you can have system and data formats on the same disc, and you can even format one half of the disc without harming the data on the other.

Coming free (a good £15-£25 cheaper than the many commercial utilities available) *MultiArc* is the most cost-effective utility for anyone who wants to make the most cost-effective use of their high-capacity drives.

82%

Zyclons

By Wolfgang Stengel of Wizcat

Zyclons is a weird and wacky game for two to four people. What happens is that all four players control a ship each which they move around a ludicrously small playing area while trying to avoid four lethal asteroids. The asteroids are drawn magnetically to the ships, but as well as trying to avoid them yourself you have to try to shake them off onto someone else to have any hope of winning.

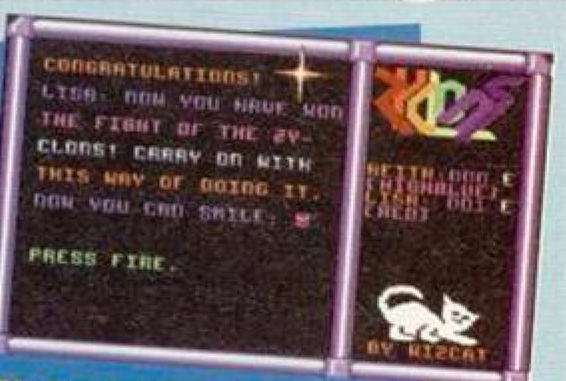


We think it's called Zyclons – it's hard to decipher...

You can use a little shield to fend off the stones, but things are usually so darned confusing that just stopping to work out how to move it into position is not a good idea. In fact, things are so confused that you'll often find it difficult to know what's going on at all. But then that's the beauty of this game – it is total multiplayer mayhem.



Imagine the yellow circle is the sun, the blue circle is the Earth and the red one is Venus. Pointless isn't it?



"And you can smile..."?! Oh puh-lease, pass the sick bag.

Zyclons is generally a decently put-together game the most important feature being the ability to redefine the keys for all four players. It has also been well programmed; the sprites don't slow down at all when there are four people playing (but then they never really move all that fast).

Zyclons is only any good if you've got three suitably intoxicated friends handy, in which case it delivers enough action to keep things interesting. Otherwise it's not worth bothering with.

70%

Next Month...

Next month, along with our occasional PD disczine spot, I'll be casting my critical eyes over the CPC's most difficult game and listening to a new utility that speaks for itself.

Interview: Taking A Firm Line

Why bother running a PD library? Do PD libraries make profits? And why do buses always come in pairs? We decided to ask a man whose vault is never full, Mark McCormick of The Firm.

First Mark, save me the bother and tell the readers what this new group 'The Firm' is all about, and what your role in it is.

The Firm is a new Irish based CPC group, which includes, er... you, Keith... me, Derek Hyland (Amsof), Alpha, Malfunction and Justin Williams. Our products include *CPC Forever* and *The Bad Mag*, which we've taken over from Crown of Beng. We've got a utility or two in the pipeline at the moment, and a few French or German coders may be joining soon. Personally, I've been known to code a demo or two, write lots of very strange articles for The Bad Mag, do the DTP for *CPC Forever* and run The Vault. Swapping fills the gaps in my schedule.

You're a coder as well as a PD librarian. Why does the unskilled job of running the PD library take precedence over the skillful art of coding?

The PD library's not being substituted for programming because I'm not really a great coder (*modesty – Keith*). I can code a demo or two but I don't have the discipline necessary to write a game, which is getting a little more complicated, or the techy info to write utilities. I'm doing enough at the moment with *The Bad Mag* and *CPC Forever* anyway.

Does The Vault make a profit?

Hard one. I'm supposed to say no. I don't have an exact idea of how much I lost or earned but I'd say I've earned 20 pounds since I've been open (three months). I don't make any profit on the people that supply their own disks, I only make money on selling disks. I'm not really running The Vault for the profit – it's practically non-existent! Of course, a lot of the money went on responding to the initial onslaught of catalogue requests and I didn't have any orders for the first month or so, so maybe I'll have a bit of income in the future. I doubt it, though. Moral: don't start a PD library for the money.

Would you say most PD libraries make profits?

PD librarians have said that PD libraries don't make a profit. It's actually very easy to make a profit, and needless to say most libraries do, though not a very substantial one. In truth the definitive statement is that you make money if you want to make money and have the sense to know how to do it.

Do PD librarians ever give a share of their profits to the people upon whose backs said profits are made, namely the people that write the software that fills PD libraries?

No PD library in the history of the world has ever sent money to the author of a program they distribute as a token of appreciation for the money they make (and please correct me if I'm wrong). Most libraries don't even pay the shareware fees for the shareware they distribute. Shareware authors get a little money for their work, though on CPC shareware fees are basically ignored. The amount of people who pay for even the most popular shareware programs can be counted on your fingers.

Cynics like myself find it difficult to spot any differences between PD libraries. Is there anything even remotely different about The Vault?

Well, there aren't really any differences, apart from the fact that The Vault has no selections of demos – since there seems to be a mild rejection of these from your average customer. And, of course, there's no 'PD' in the name. This is mainly because I want to separate myself from 'Joe PD' who's been set up in the little PD boom of the last year with software taken from the other libraries. The Vault also has the nicest menus (or so I'm told).

Finally Mark, is there anything you'd like to get off your chest (besides excess hair that is)?

Contrary to popular belief, Ireland is no longer part of the United Kingdom. Royal Mail is British. Royal Mail stamps are thus British. Don't send me British stamps! Send me 32p to reply to your letter and for orders a table of Irish postal rates is included in the catalogue.

● Contact the Vault at 43 Windfield Gardens, Clybaun Road, Galway, Ireland ☎ 010 353 91 28204.

Further reading

Read all about it! Read all about it! David Crookes ploughs through this month's literary offerings from the 'zine scene.

BUT FIRST, THE HEADLINES...

● It seems as if *CPC Express*, the magazine that was reviewed in *AA*105, has been relaunched again. You may remember that it used to be called *Amstrad Express* before that name was scrapped in favour of *CPC Express*.

Well now its name is *CPC Trekking*. It still costs £1.50 plus a disc and an SAE and you should contact SA Sandhu at 17 Cromer Road, London, SW17 9JN.

● *CPC Now*, James Hockney's fanzine, has closed even though it appears that its subscribers haven't got their money back yet. However, James is thinking of starting another fanzine so if you want more details give him a ring on 0353 663030.

AMSTRAD CONTACT

REVIEW

Price: £7 for 10 issues
Editor: Dave Muggeridge
Address: 3 Lakers Lea, Plaistow Road, Loxwood, Near Billingshurst, West Sussex RH14 OTT

Dave Muggeridge is becoming quite a well-known CPC celeb and it all started with this little beast – *Amstrad Contact* (which is, in fact, more than just a 'zine, it's a complete user group, but we'll concentrate on the 'zine here, because that's our business). It has now been around for exactly a year and is celebrating with a special birthday issue.



Amstrad Contact is certainly establishing itself. When it first appeared it wasn't the greatest mag around and even though it still isn't the best, it is certainly making its bid for the top position stopping at nothing to bring you interesting articles and useful features. If you've tried it before and weren't impressed perhaps now's the time to give it another try.

It is still loosely based on transferring Amstrad software from tape to disk although it is continuously embarking on fresh topics becoming in the process a solid all-rounder of a mag.

The birthday issue (which is, in fact, number seven – don't ask) has its fair share of meaty articles. For example, a two-page spread is dedicated to setting up an ASCII file for printing via a *Typesetter*. It seems to have been lifted from another (probably defunct) mag but Dave has pointed out that everything in the mag has been used with permission from the original authors so everything's totally kosher.

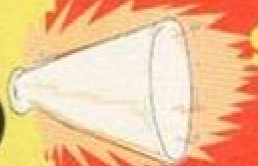
There's another well-written and intensifying read in Enter The PD Challenge; it's a tutorial explaining how CPC users can design a screen in overscan (ie, no border) using only a few programs (and no sticky backed plastic).

There are literally loads of game reviews to cater for the joystick lovers amongst you but for those still yearning for even more serious stuff, a column on protecting your files and a guide to make your discs print a `RUN| DISC` prompt when you catalogue it are both waiting for you to take a peek at.

But while the content is certainly up to scratch the design isn't so good. It tends to look a bit cluttered and scruffy, probably because of the use of too many different fonts and pictures (though the covers have improved a great deal over the last couple of issues) Thankfully it's a two-column 'zine which helps to space things out a bit more clearly.

Basically what I'm trying to put across is that *Amstrad Contact*, while severely lacking in design flair, has got a great deal to offer serious CPC users (and a bit to offer those of a more gaming inclination).

Content: 85%
Appearance: 61%
Overall: 82%



SPEAKING OUT!

What is the point in wasting a few quid on something that's basically just a few grubby photocopied sheets of paper, stapled in the middle and without any real content? That's what a lot of people regard fanzines as being like, anyway.

But I'm sorry to disillusion anybody who thinks in that way because while that used to be the case across the whole spectrum of fanzines from football ones right through the computer-dedicated variety, it isn't anymore. Now most of them look professional and contain a lot of hard work. They are fast becoming as good as proper magazines (anyone ever seen a copy of the cult TV 'zine *DWB?* – very impressive).

So why should you buy a fanzine when *AA* gives you a lot of information of the highest quality? It's like this – the fanzines for the best home computer ever invented (the CPC, of course) can give you a deeper insight into what is going on in different CPC areas because they tend to specialise in certain topics (which *AA* cannot do without getting scores of letters complaining that they are giving too much coverage to the demo scene and not enough to the intricacies of programming nuclear spaceprobes, or whatever). However CPC fanzines can offer more in-depth coverage on specialised topics because they can survive by selling just a few hundred copies.

Specialist knowledge

CPC fanzines are a bit like satellite television which has whole channels dedicated to certain areas, be it MTV's music coverage or Discovery's documentaries. The fanzines can offer you literature on hacking and making back-ups (*Amstrad Contact*), Public Domain software (*Artificial Intelligence*), games (*Alive and Kicking* and *Amzine*) or techy subjects (*WACCI* and *CPC User*). So you are never going to be short of things to read in the area that interests you.

Most importantly, they are written for CPC users by CPC users so the enthusiasm is there to enjoy. It's common sense to complement your read of *Amstrad Action* with a dip into the fanzines because, to coin a cliché, you won't be disappointed.

HIT THE HEADLINES

If you edit a 'zine you could get more people reading it by getting a mention in Further Reading. Whether you've got some news you want to tell us or you want the full review treatment (if you dare) all you have to do to achieve publishing fame and fortune is write to Further Reading, *Amstrad Action*, Future Publishing, 30 Monmouth Street, Bath, Avon BA1 2BW. You know it makes sense.

HELP!

Velcome. Zit down. Tell me your problemz Ahh, I zee, there are spezzific bitz in spezzific games vitch are driveeng you mad. Do not vory, for I, Lee Rouane, am ze vorld's foremost expert in treateeng zuch problemz (and in doeeng verry poor mock European accentz, y'know)

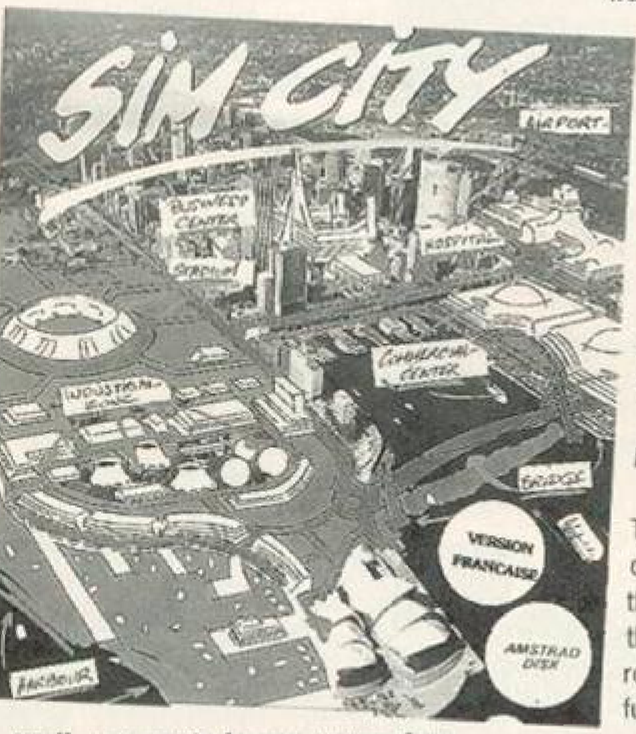
Dear Cheat Mode,
Could you possibly tell me how to land the spaceship in *Uridium*?
Michael Kaar, Bollington, Macclesfield.

To tell you the truth, Michael, I struggled for a hell of a long time before I found out where to ditch down in this great shoot-'em-up. In the end I discovered that you have to fly to the far left deck, then bank around and fly your craft in between the green arrows. After that you should be able to land, no hassle. **Lee**



Flying's easy, it's landing that's tricky.

Dear Cheat Mode,
In *AA*103 there was a request for help in building a metropolis in *Sim City*. Okay, here are some tips that should do the trick:



Well, you can't do any worse than Birmingham's city planners.

1 As it suggests in the manual, have the same number of industrial zones as commercial zones. The number of residential zones should be the sum of those two put together.

2 To attract more upper class citizens use railways rather than road (adding road where necessary) and build extra police deptartments.

3 Put the tax rate on 0 per cent all year round. In December, put it up to 20 per cent. In January, immediately put it back down to 0 per cent. This way the people are conned into thinking you are not charging them any tax.

4 Once you have lots of money, save the city on disc and then bulldoze the lot. Save the empty terrain that remains. Now, whenever you want to start building a new city load this up to begin with all the money you had before.

And to answer the question about the gene codes, they are for accessing the 65,535 different empty terrains. Whenever you start a new city the computer will randomly generate one of these. If you want to choose your own gene use the INPUT NEW GENE option. To start a city with this gene use the START CITY WITH THIS GENE function.
Paul Taylor, Saffron Walden, Essex.

Dear Cheat Mode,
I have a cassette game called *Treasure Island Dizzy* and I can not get any further than the forest because I can't work out how to get over the rocks.
Please help !
Peter Klemencic, Ballycotton, Co. Cork.

To get over the rocks you must first collect the dynamite from over the water on the far left of the map. Once collected, take these back to the rocks and use them next to the rocks. The rocks will then blow up, enabling you to get further than the forest. **Lee**

Dear Cheat Mode,
I've heard that there is a password to get to the later levels of *Bubble Bobble*. Is this true?
Jimmy Weatherill, Jersey.

Yes. Next! **Lee**

Dear Cheat Mode,
I know it's cheating, but I'm stuck on level one of *Vindicator*, and I'd really like to see what the the next levels are like (even though I'll probably get killed straight away) What are the passwords?
Michael Kaar, Bollington, Macclesfield.

Level two: OPPENHEIMER
Level three: ENOLAGAY
And don't worry about cheating. If people didn't do it I'd be out of a job. **Lee**

PS Oh yeah, the password for *Bubble Bobble* is: ZZZ133VZZZZZZ4ZZZ1Z4V44ZZ1Y24V32. Sorry, Jimmy, couldn't resist that. **Lee**

CAN YOU HELP?

Each month we get letters from readers at their wits' end asking us all sorts of strange and impossible questions. Rather than let them down completely, we have decided to let you, the public, have a go at providing the answers for them. If you think you can answer any of the questions here then write to:
'Give Lee A Hand', *Amstrad Action*, 30 Monmouth Street, Bath, Avon BA1 2BW.
Who knows, there might just be a prize lurking for the best answer every month...

Dear Cheat Mode,
Please can you help me as I am having serious trouble with some games.

1 How on earth do you get on to tape two, side one of *Never Ending Story*? Do you have to get into the Ivory Tower? If so, how? A map of the rooms would be very useful plus a list of what you need to do/get.

2 *Titanic Blinky* is doing my head in. When you finish the part in the sea and enter the bottom of the boat you come to a strange room. It contains a gun and loads of square things. Four things are on the bottom of the screen which count down from four when you walk through them. What do I do?
A Hubbard, South Humberside.

Dear Cheat Mode,
Please can anyone help me on the covertape game *Anarchy*? How do you get through Level 10 where you cannot see the blocks? Does anyone have a multiface poke to stop the timer?
John Gevous, Blackwood, Gwent.

Well, they've foxed me, so now it's up to astound the world with your vast knowledge. Lee

Cheat Mode

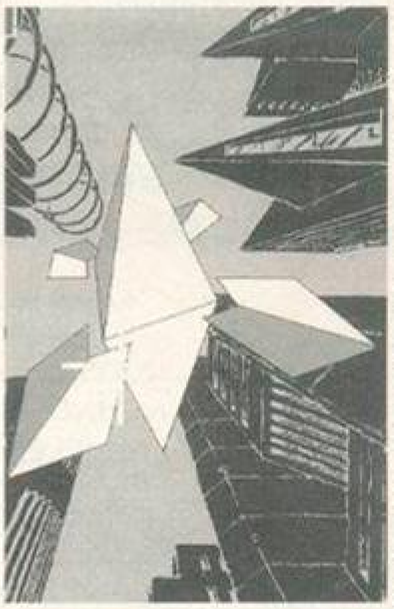
Playing it straight might be the honourable thing to do, but we don't adhere to all that US sit-com cod morality here. That's why, every month, we get Lee Rounane to present you skip-loads of lovely cheats, pokes and hints. Ah, the easy life...

CHOLO

First request goes to Michael Goudman of Penkridge, Staffs who admits to being absolutely foxed with a neat little puzzler named *Cholo*. Never fear, Mike, as this disc poke will cure all those late night blues. Run this poke with your *Cholo* disc in the drive.

```
EAFO  100·'Cholo·-·disk
FAEN  110·'by·Julian·Page
AAKN  120·'
DAMP  130·DATA·21,10,40,11
EAOA  140·DATA·50,03,01,B0
EAIE  150·DATA·00,D5,ED,B0
EAPC  160·DATA·C9,48,69,21
EAJC  170·DATA·21,00,BE,36
EAFE  180·DATA·82,DD,7E,00
EAOD  190·DATA·32,4C,03,CD
EAJE  200·DATA·D4,BC,22,4D
EADC  210·DATA·03,79,32,4F
EAFB  220·DATA·03,21,E5,03
EALD  230·DATA·DF,4D,03,21
EAEC  240·DATA·EF,03,11,00
EAKC  250·DATA·40,06,04,CD
EAHH  260·DATA·77,BC,EB,CD
EAGG  270·DATA·83,BC,CD,7A
EABG  280·DATA·BC,3E,AF,32
EAOC  290·DATA·A7,00,21,8B
EANA  300·DATA·03,22,C2,00
EAKC  310·DATA·C3,59,00,3A
EAPD  320·DATA·4C,03,47,AF
EADE  330·DATA·67,6C,CB,40
EAIC  340·DATA·28,08,3E,18
EAPC  350·DATA·32,38,AC,32
EAJF  360·DATA·84,AD,CB,48
EACD  370·DATA·28,04,AF,32
EAJE  380·DATA·D4,77,CB,50
EAND  390·DATA·28,05,3E,C9
EAPE  400·DATA·32,CC,92,AF
EACD  410·DATA·CB,58,28,03
EAPF  420·DATA·32,E8,AC,CB
EAPC  430·DATA·60,28,0B,3E
EABE  440·DATA·77,32,4E,9F
EADE  450·DATA·3E,3E,32,4C
EABH  460·DATA·9F,AF,CB,68
EAIB  470·DATA·28,09,21,18
EAEC  480·DATA·14,22,84,A4
EADC  490·DATA·21,00,00,CB
EALA  500·DATA·70,28,03,22
EAKG  510·DATA·BF,A9,CB,78
EAPB  520·DATA·28,04,3D,32
EAND  530·DATA·67,AC,C3,00
EAPB  540·DATA·53,2D,00,37
EAFA  550·DATA·00,01,04,08
EAFA  560·DATA·01,03,00,44
EAGB  570·DATA·49,53,43,00
FAFC  580·FOR·X=&4000·TO·&40B3
FAFE  590·READ·A$:A=VAL("&"+A$)
EADD  600·POKE·X,A:C=C+A
CAOG  610·NEXT·X
EAKP  620·IF·C=&3E75·THEN·640
GAOM  630·PRINT"DATA·ERROR":STOP
FAHG  640·MODE·1:INK·0,0:PEN·2
FAJG  650·INK·1,11:INK·2,26:C=1
GABF  660·INK·3,24:V=0:DEFSTR·A,B
FALI  670·A="TRAVEL·ON·WATER
CAPP  680·GOSUB·890
GAGH  690·A="NO·RADIATION·DAMAGE
CAIP  700·GOSUB·890
GABB  710·A="IMMUNE·TO·ATTACKS
CAKP  720·GOSUB·890
GAPF  730·A="ENEMY·CAN'T·SEE·YOU
CAMP  740·GOSUB·890
GAAC  750·A="STUN·ENEMY-·1·SHOT
CAOP  760·GOSUB·890
GAFH  770·A="NO·PASSWORD·NEEDED"
DAAA  780·GOSUB·890
FAMJ  790·A="NO·ACCESS·DENIAL
CAJP  800·GOSUB·890
FALN  810·A="NO·SELF-DESTRUCT
CALP  820·GOSUB·890
FAEN  830·PRINT"INSERT·CHOLO
FAIK  840·PRINT"DISC,PRESS·A
DAGH  850·PRINT"KEY!
```


I reckon he should have taken the lift.


Time to wheel out the 'load of old blocks' gag again...

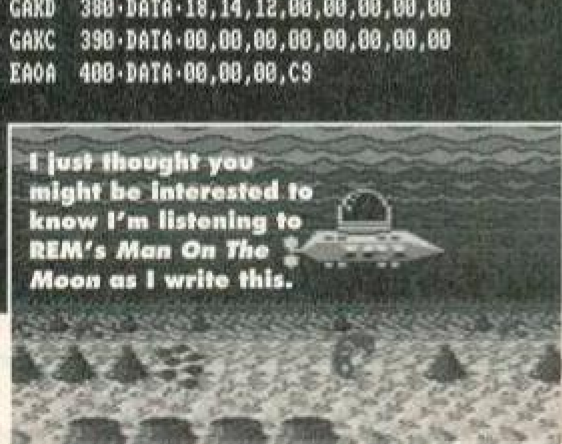

The 1974 bubblegum champ of Hackney.

NEBULUS

Alex Cochrane has spoilt us in the past with his numerous pokes etc. This time he provides Infinite stuff for the covertape blockbusters *Nebulus*. Cheers Alex, you're a mate

```
EANO  10·'NEBULUS·AA·CHEAT
IADD  20·'AA·TRANSFER·AND·TAPE·VERSION
GAFO  30·'INFINITE·TIME·AND·LIVES
HADC  40·'(c)Alex·Cochrane·1994
OAOO  50·GOSUB·200:'poke·code·for·tape·and·dis
      c·cheat
LAON  60·MODE·1:INK·0,0:BORDER·0:INK·1,26:INK·
      2,24:INK·3,6
DBCL  70·LOCATE·14,1:PEN·1:PRINT"NEBULUS·CHEAT
      ":LOCATE·14,2:PEN·2:PRINT·STRING$(13,"*")
OADB  80·PRINT:PRINT:PRINT:PEN·3:PRINT·SPC(5);
      "1.·TAPE·CHEAT"
LAFJ  90·PRINT:PRINT·SPC(5);"2.·DISC·TRANSFER·
      CHEAT"
PAEP  100·PRINT:PRINT:PRINT:PRINT:PEN·1:PRINT·
      SPC(14);"PRESS·1·OR·2"
EANK  110·WHILE·INKEY$<>""
HAPD  120·IF·INKEY(64)=0·THEN·CALL·&40
GADB  130·IF·INKEY(65)=0·THEN·170
EAIA  140·WEND:GOTO·110
BAMP  150·STOP
GAGA  160·'disc·transfer
JADM  170·MEMORY·&9000:LOAD"nebulus.bin"·
KAMB  180·POKE·&9114,&CD:POKE·&9115,&6C:POKE·&
      9116,0·
IAMI  190·CALL·&90C6:'EXECUTE·DISC·LOADER
HAJL  200·'CODE·TO·TAPE·LOAD·AND·CHEAT
FAKA  210·cs=0:RESTORE·240
ABHC  220·FOR·a=&40·TO·&C3:READ·b$:b=VAL("&"+b
      $):POKE·a,b:cs=cs+b:NEXT
PALF  230·IF·cs<>10280·THEN·PRINT"data·error."
      :END·ELSE·RETURN
GAOG  240·DATA·CD,83,00,21,00,C0,11,00
GABL  250·DATA·40,3E,87,CD,A1,BC,21,00
GABJ  260·DATA·01,11,00,80,3E,87,CD,A1
GAPK  270·DATA·BC,3E,00,21,B3,00,CD,93
GAGH  280·DATA·00,21,00,C0,11,54,3B,3E
GAFM  290·DATA·87,CD,A1,BC,F3,21,00,C0
GAGI  300·DATA·11,00,81,01,54,3B,ED,B0
GADK  310·DATA·3E,00,32,EF,85,32,C7,85
GADL  320·DATA·C3,00,01,3E,00,CD,0E,BC
GAAK  330·DATA·01,06,06,CD,38,BC,3E,00
GAJJ  340·DATA·21,A3,00,46,4E,23,F5,E5
GAGO  350·DATA·CD,32,BC,E1,F1,3C,FE,10
GAPI  360·DATA·20,F1,C9,00,02,0D,0D,09
GANI  370·DATA·06,0B,14,09,03,1A,0F,0D
GAKD  380·DATA·18,14,12,00,00,00,00,00
GAKC  390·DATA·00,00,00,00,00,00,00,00
EAOA  400·DATA·00,00,00,C9
```


The architect was influenced by the Pompidou centre.


I just thought you might be interested to know I'm listening to REM's *Man On The Moon* as I write this.

```
FANI  860·CALL·&BB03:CALL·&BB06
DAHG  870·CALL·&4000,V
BAHJ  880·END
FANH  890·CLS:PRINT·A;"·Y/N·?
EACB  900·B="":WHILE·B=""
EAON  910·B=UPPER$(INKEY$)
BAJO  920·WEND
EANI  930·V=V·OR·C*-(B="Y")
DAGP  940·C=C*2:RETURN
```

CYBERNOID 2

That Alex Cochrane has really been busy busting covertape programs. Not stopping with *Nebulus*, he's also provided this gem of a listing for *Cybernoid 2*.

```
HAJJ  10·'CYBERNOID·II·AA·LOADER·v1.2
GABA  20·'(c)·ALEX·COCHRANE·1994
CANL  30·GOSUB·190
KAIH  40·INK·0,0:BORDER·0:MODE·2:INK·1,26:GOSU
      B·200
BBLL  50·PEN·1:PRINT·SPACE$(34);"CYBERNOID·II"
      :PRINT·SPACE$(33);"=============="
EBKO  60·PRINT:INPUT"Would·you·like·infinite·l
      ives·(Y/N):";a$:a$=UPPER$(a$)
IALP  70·IF·a$="Y"·THEN·POKE·&BED5,0:GOTO·120
CBCD  80·PRINT:INPUT"Would·you·like·255·lives·
      (Y/N):";a$:a$=UPPER$(a$)
HAEF  90·IF·a$="Y"·THEN·POKE·&BED0,&FF
PAMC  100·IF·a$()"N"·THEN·80·ELSE·INPUT"How·ma
      ny·(normal·4):";a
HAHK  110·IF·a=0·THEN·a=4:POKE·&BED0,a
HBEI  120·PRINT:PRINT:INPUT"Are·you·loading·fr
      om·tape·or·disc·(T/D)";a$:a$=UPPER$(a$)
EACO  130·IF·a$="T"·THEN·150·
IAHK  140·IF·a$()"D"·THEN·120·ELSE·CALL·&BE80
IBEH  150·PRINT:PRINT"Insert·tape.·Rewound·to·
      start":PRINT:PRINT"Then·Press·play"
BBHA  160·PRINT:PRINT"Please·Press·any·key":WH
      ILE·INKEY$="":WEND
CBLE  170·|TAPE:LOAD"!game.bas",&A000:POKE·&A0
      83,&C3:POKE·&A084,&C3:POKE·&A085,&BE
CAMO  180·CALL·&A000
IAED  190·DATA·CD,DC,BE,06,05,21,1C,BF,CD,77
IAOC  200·DATA·BC,21,00,C0,CD,83,BC,CD,7A,BC
HABO  210·DATA·06,06,21,1C,BF,CD,77,BC,21,00
IABB  220·DATA·01,CD,83,BC,CD,7A,BC,3E,00,21
IAID  230·DATA·0C,BF,CD,EC,BE,3E,31,32,21,BF
HAEO  240·DATA·06,06,21,1C,BF,CD,77,BC,21,00
IAHC  250·DATA·C0,CD,83,BC,CD,7A,BC,F3,21,00
HAPM  260·DATA·C0,11,00,A0,01,00,1F,ED,B0,3E
HADM  270·DATA·04,32,2A,01,3E,35,32,6B,2B,C3
HALL  280·DATA·00,01,3E,00,CD,0E,BC,01,00,00
IAGC  290·DATA·CD,38,BC,3E,00,21,FC,BE,46,4E
IACD  300·DATA·23,F5,E5,CD,32,BC,E1,F1,3C,FE
HAPJ  310·DATA·10,20,F1,C9,00,1A,06,0D,00,12
HAEI  320·DATA·01,18,0F,03,10,09,0A,13,02,14
HAMD  330·DATA·00,00,00,00,00,00,00,00,00,00
HAJG  340·DATA·00,00,00,00,00,00,63,79,62,65
CAKO  350·DATA·72,30
CALM  360·DATA·*AC*
HAJH  370·RESTORE·190:chk=0:x=&BE80
JAME  380·READ·a$:IF·a$="*AC*"·THEN·410·ELSE·3
      90
GAGD  390·a=VAL("&"+a$):POKE·x,a
HAKN  400·x=x+1:chk=chk+a:GOTO·380
HAPH  410·IF·chk()&377E·THEN·GOTO·430
CAGJ  420·RETURN
KAMN  430·PRINT·"Data·Error·Old·Bean·...":END
```

ALIENS

Jacqui Owen from Wolverhampton writes explaining that her son has a big problem with *Aliens*. Well, Jacqui, this poke provides infinite ammo, invulnerability and the choice to start in any room. If he's stuck now, give it up as a lost cause !

```
FALG  100·'·Aliens·-·tape
FAPL  110·'·by·Tony·Hoyle
AAKN  120·'
DAMP  130·'·Set·inks
CALC  140·MODE·1
CAEM  150·BORDER·0
DACO  160·FOR·n=0·TO·15
CAFF  170·READ·a
CAGL  180·INK·n,a
BAJP  190·NEXT
EAED  200·DATA·0,26,6,20,17
EAHD  210·DATA·18,1,25,15,3
EAFA  220·DATA·16,13,13,22
CAEO  230·DATA·14,13
HADL  240·'name·of·characters
DAGM  250·DATA·RIPLEY
DAGL  260·DATA·GORMAN
DAFG  270·DATA·HICKS
DAJL  280·DATA·BISHOP
EAEC  290·DATA·VASQUEZ
DAGG  300·DATA·BURKE
EAJN  310·SYMBOL·AFTER·256
DAEL  320·OPENOUT"!p"
DAIN  330·MEMORY·&1FFF
CAJM  340·DIM·n$(5)
DACL  350·FOR·n=0·TO·5
DAGE  360·READ·n$(n)
BAMJ  370·CLS
IAGP  380·PRINT"Current·Name:·";n$(n)
MAML  390·PRINT"Enter·new·name·or·hit·Return"
CAJO  400·INPUT·a$
GAJC  410·IF·a$()""·THEN·n$(n)=a$
OACC  420·IF·LEN(a$)·)7·THEN·PRINT·"Name·too·l
      ong!":GOTO·390
BAGP  430·NEXT
LAFK  440·CLS:INPUT·"Room·to·start·in";room
BALJ  450·CLS
EAMF  460·'·load·code
EAPM  470·LOAD"!scroll"
GAEE  480·LOAD"!credits",&3000
CAHO  490·CALL·&8000
FABH  500·LOAD"!title",&3000
EAPI  510·MODE·0:CALL·&8000
EADL  520·LOAD"!loader"
DADM  530·POKE·&80A3,&80
DAEO  540·POKE·&80A4,&BE
DAEL  550·FOR·n=0·TO·5
FAOP  560·FOR·j=1·TO·LEN(n$(n))
KADI  570·POKE·&BECB+(8*n)+j-1,·ASC(MID$(n$(n)
      ,j,1))
IAIG  580·NEXT·j:POKE·&BECB+(8*n)+j-1,·255
BANP  590·NEXT
CAAI  600·x=&BE80
HAKE  610·'·read·machine·code
CAJH  620·READ·a$
GAHP  630·IF·a$="xx"·THEN·CALL·&8000
NAKF  640·IF·a$()"yy"·THEN·POKE·x,VAL·("&"+a$)
      :x=x+1:GOTO·600
IAHF  650·POKE·x,room:x=x+1:GOTO·600
FADH  660·'·Machine·code
FANI  670·DATA·3e,yy,32,3b,02
FAPG  680·DATA·dd,21,96,14,dd
FAMA  690·DATA·36,00,36,dd,36
EAFP  700·DATA·01,00,dd,36,02
FAFA  710·DATA·00,3e,87,32,3d
EANP  720·DATA·02,3e,03,32,3e
FABA  730·DATA·02,3e,e3,32,51
FAED  740·DATA·02,3e,cf,32,52
FADG  750·DATA·02,af,32,8d,1b
FAAJ  760·DATA·21,cb,be,11,2f
FAMC  770·DATA·1f,01,30,00,ed
FAFI  780·DATA·b0,c3,40,00,xx
```

IKARI WARRIORS

When the bombs are flying about like the furniture at my local on a Friday night, you could do with a bit of help. And that's what Nick Grey of Leatherhead has provided in the way of tips for *Ikari Warriors*. Take it away...

- The section leading up to the first tank is one of the trickiest in the game. Grenade and shoot frequently. Replenish your bullets by picking up the readily available supplies. Always slow down to kill the soldiers because *they carry supplies you can pick up. When you* come to the pillbox stand below it and slightly off centre, then grenade it.
- When you're in the tank, don't waste bombs – you can run over most of the soldiers. If the tank is hit and starts to flash, get out as soon as possible by holding the fire button down and move well away from it. To blow up an enemy tank stand out of its firing range a couple of centimetres from the edge of the screen. Fire a grenade as the tank moves across the screen and move up with it. If the tank fires in line with you, quickly move down again.
- When a helicopter arrives, keep firing grenades and walk forward in line with it.
- When crossing water, keep well away from the blue blobs because they kill even when you aren't touching them. You can shoot them only when they appear or disappear at the edge of the screen.
- On the final blue and yellow section, the small *box things don't do anything, but be careful of* the helicopters (well you would take more with helicopters than small boxes). On the barracks you should pick off the men before advancing through the area. Try to take on bazooka firers from the side as they always fire down the screen, but with a long range.
- Stay out of the water as much as possible; you move more slowly and are more vulnerable.
- Keep away from the edges of the screen because enemy soldiers can appear at any time.

AA

Are you confused by listings?

Don't panic if you've never typed in a listing before and you can't seem to get them to work. There's a full explanation of how to type in the darned things and what the four-letter codes at the beginning of each line mean in the Type-Ins section which starts on page 23 this month.



Put your tongue out and say, "ahhh". And try some mouthwash in future.

CONT. FROM PAGE 24

RS-DOS, PC-style operating system for CPCs. Over 40 commands: Ren copy, etc. On-line help. Send 1x3-inch or 2x3.5-inch discs plus £4 to A Ratcliffe, 37 Parkland Grove, Ashford, Middlesex, TW15 2JB. Cheques payable to A Ratcliffe.
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Pen pals wanted! Any age. Basic/M/Code programming interest preferred. Help given if you have any programming problems. All letters answered. I'm 16 and have a 464 with 3.5-inch drive and a 6128 Plus. Write to Ian Woods, 32 Singleton Road, Ellesmere Port, South Wirral, Cheshire L65 7BG.
Writers needed for Amstrad User disczine. Send sample articles on 3-inch disc in ASCII format to Brian Leahy, St Mary's Road, Kingscourt, Co Cavan, Ireland. All discs returned.
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User manual for CPC6128. User manual for Advanced Art Studio. Soft 971 guide to CP/M Plus. Any CPC6128 ROMs, etc. Details, prices – R Frith, 7 Burned Grove, Halifax HX3 7PU.
Wanted: users' handbook for Amstrad, DMP 3250di printer. Phone 0264 720461 stating price. Will pay postage.
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Tau Ceti Special Edition, Tobruck, Silent Service. If you can help call Malcolm on 0382 553077.
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Old tape game called Stockmarket. Will pay for a copy on tape or disc. Contact Russell on 081 421-3521.
Does anyone out there have a copy of Ancient Battles on disc or tape for sale? 8-bit printer port also wanted. PL Ramsay, 12 Naseby Avenue, Blackley, Manchester M9 6JY.
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PD Fun
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A policy of 'no serious software'.

Sheepsoft
Paul Fairman, 298c Holton Road, Barry, South Wales, CF6 6HW.

Sleepwalker PD
Disk software: Joe Moulding, 9 Meeting House Lane, Balsall Common, Nr Coventry CV7 7FX

Tape PD
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Also get in touch if you're into PBMs.

The Vault
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CPC User
☎ 0329 234291
The UAUG's fanzine.

CPC Undercover
37 Trimingham Drive, Brandlesholme, Bury, Lancashire
A technically-minded fanzine that's also on the look out for writers.

Ultra Games
20 Lancaster Terrace, Chester-Le-Street, Co Durham, DH3 3NW
Cassette-based multi-format fanzine.

User Groups

Amstrad Contact
☎ 0403 753348
Sussex-based group that also runs a technical helpline for CPC users.

UAUG (United Amstrad User Group)
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WACCI
☎ 0602 725108
They're fab. Give 'em a ring.

Independent Software Companies

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You name it, they do it, really – take a look at the interview in ish 96.

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The Examiner

Some people say life is just one big adventure. Others say that big adventures are their life. But Debby Howard simply says, "Windowsill." And that's enough for us.•

The Arnold Blackwood Adventures

PRICE: £2 (cassette).
AVAILABLE FROM: WoW Software, 78 Radipole Lane, Weymouth, Dorset, DT4 9RS.
CROSSED CHEQUES/POSTAL ORDERS PAYABLE TO: JG Pancott

There are five complete Arnold Blackwood adventures. They can be purchased separately on tape, but if you want to get the adventure/s on disc you will have to buy all the five adventures at once for £8 (a saving of £2, well worth considering).

The Trial of Arnold Blackwood

"I'm confused! This brain-ache is undoubtedly due the fact that I seem to be in the middle of a thicket with a lump on my head the size of a golf ball (that's the size of the lump – not my head), and I haven't got a clue why. Amazingly I can recall my name. Arnold Blackwood... that's me.

"I seem to recognise this place as part of the grounds of Lord Erebus' estate. And I would not be here unless at his bidding. But why?

"I guess I'm on some kind of a mission. That old Erebus bloke, he's no fool. Eccentric – yes! Mean – yes! Stupid – no. He's used my services before. Maybe if I search around I might find some clues which'll kick-start my memory into action. Hopefully, I'll sort it out without the old goat realising my present loss of memory.

"Well... at least I know he's filthy rich with a stack of expensive baubles, a complete recluse and terrified of dogs. Meticulously tidy too!"

The Trail Of Arnold Blackwood was written by Colin Harris formerly known as Nemesis of Bonzo Doo Dah fame. Colin has managed to create a terrific atmosphere with a decent combination of puzzles to keep you guessing. It is very easy to map; there are a 100 locations and all you need is to draw a 10x10 square grid and you can't really get lost.

Trail has been written in Basic but don't be fooled – Colin is an excellent programmer and it shows (the fact that he's an excellent programmer, that is, not that it was written in Basic). I would recommend this as a good adventure for beginners because there are no real 'headache' puzzles; all you need is a little common sense to find the right commands. Don't forget, though, to keep all the valuable objects that you come across.

75%

Lords & Ladies of Adventure

If you are stuck in a game listed below, these kind souls are willing to help you. Please remember to enclose an SAE with your enquiry and DON'T ask for a full solution, as you might be disappointed (and anyway, what's the point in playing an adventure when you know what you're supposed to be doing?). If you want to become a Lord or Lady please write in with your full list.

- *Heroes Of Kam* – Ewan 'Chill' Riley, 67\1 Ferry Road, Leith, Edinburgh.
- *Five On A Treasure Island, Werewolf Simulator* – Samantha Blair, 21 Obelisk Rise, Kingsthorpe, Northampton NN2 8QT.
- *Five On A Treasure Island* – Tommy MacDonald, 7 County Cottages, Piperhill, Nairn.
- *Adult 2, Bew Bews, Blue Raider 2, Can I Cheat Death?, Doomlords 1-3, Dick-Ed, Escape From The Planet Of Doom, Firestone, Jason And The Argonauts, Lords Of Time, Nite-Time, Red Moon, Spaced-Out, Welladay, Yawn* – Paul White, 18 Conifer Road, Coxford, Southampton, Hampshire SO1 6FX.
- *Shard Of Inovar, Five On A Treasure Island, Holiday 2, Mell, Hobbit, Lords Of The Rings, Shadows Of Mordor, all Dizzy games* – Andrew Hughes, 12 Colliers Close, Woodhouse, Sheffield, South Yorkshire SY3 7DE.

Where to go

If you're looking for new and re-released adventures, then drop these people a line (enclosing an SAE, of course) for their latest stock lists.

- WoW Software, 78 Radipole Lane, Weymouth, Dorset. DT4 9RS.
- Adventure Workshop, 36 Grasemere Road, Royton, Oldham, Lancashire, OL2 6SR.
- Amstrad Adventure Solution Service, 10 Overton Road, Abbey Wood, London, SE2 9SD. (This service is what it says and does not sell adventures).

Cluepot

My thanks to Stuart Mainland, from Ayrshire for this month's tips for some Public Domain adventures. Remember, I am always on the lookout for more hints and tips to your favourite adventure, so please keep them coming in.

Boredom

- Climb the street lamp for the bulb.
- Wait for the barmaid in the car park to the west of the inn.
- In the maze go west, north, north, west to get out of the maze.

Can I Cheat Death?

- To go down the manhole you will need to BUY DRINK in the bar.
- Give the model the champagne, ring and the bikini then KISS THE MODEL.
- Once you've got the egg timer go to the temple and PRAY.
- Then go east twice and JUMP ONTO TREE.

Doomlords 1

- When you're on the island dig with the spade.

Doomlords 2

- Twist the ears off the stone rabbit statue.
- Plait the hair to make a rope.

Doomlords 3

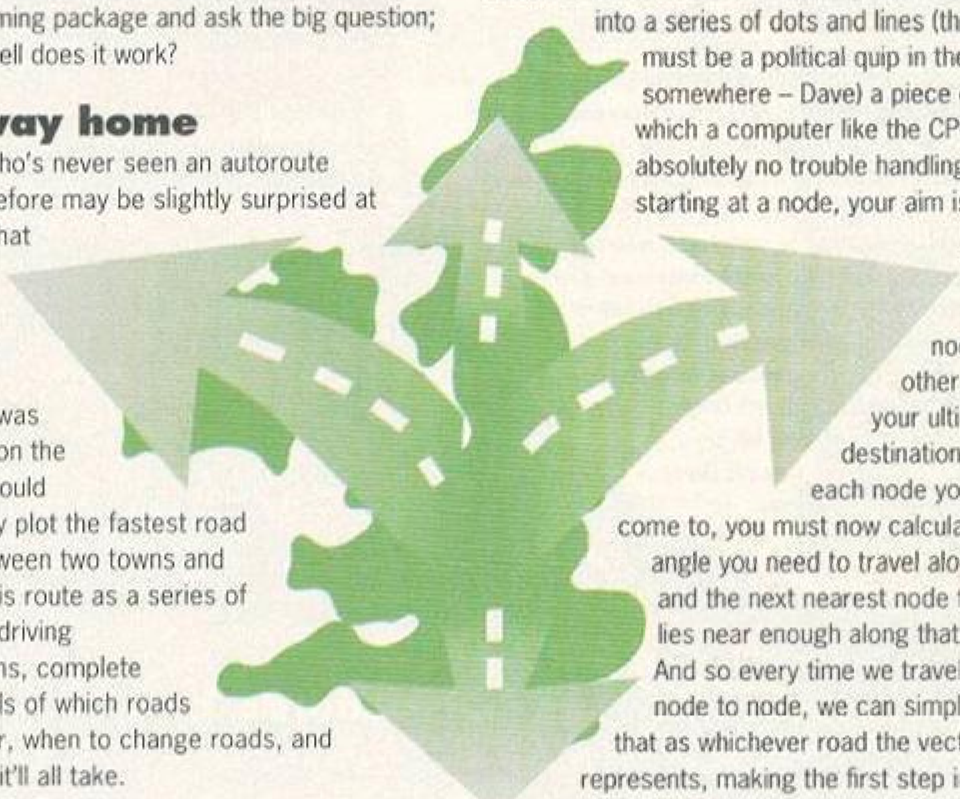
- From the starting point of the game (after entering the boat) go east, east, north, north, east to get to the island.
- To get to the second island from the first island go west, south, south, east, south.
- To get to the second island from the starting point go south, south, east, east, south, south.
- After opening the gate type GO GATE.
- And that's your lot for this month.

* Guest strap written by Stuart Campbell

RoutePlanner Preview

Simon decides to alter the direction of his serious bit this month, purely to confuse and confound huge numbers of readers (he sees it as his mission in life). In other words, he's previewing *RoutePlanner*, by looking at the way it works...

Yup, this is a slightly different serious page alright. Whether it's due to a slight lack of software or whether it's because something really needed to be said I'm not sure, but this month we're going to look into a forthcoming package and ask the big question; how the hell does it work?



My way home

Anyone who's never seen an autoroute system before may be slightly surprised at exactly what it does. A while back, you see, a program was released on the PC that would accurately plot the fastest road route between two towns and display this route as a series of standard driving instructions, complete with details of which roads to look for, when to change roads, and how long it'll all take.

Autoroute CPC

Now along comes *RoutePlanner* for the CPC, a package written by Richard Fairhurst, *AA*'s very own Techie Forum bloke. The most surprising thing is that he actually gets an application like this running on something as small as a CPC, but he does. How the hell does something like this actually work, then?

In theory, all you'd have to do is draw a map of England, and plot the course on that map. How does the CPC manage to turn that into an understandable route, though?

Nobody nodes

There are two ways we can look at a map. If we were to remove the landscape from our map looking only at the roads, we'd see the several points that they cross or end as nodes, or in our case towns. These nodes are they key to the whole thing, you see – all you have to do is find the node you want to start at, and calculate the best angle to travel at. Once we've got that angle, things get a lot simpler.

Vector's house

For the sake of argument (and to make this theory applicable to all similar programs), our roads joining the nodes are all going to be called vectors. This reduces the entire British road map into a series of dots and lines (there must be a political quip in there somewhere – Dave) a piece of data which a computer like the CPC has absolutely no trouble handling. So starting at a node, your aim is to get to the final node, in other words your ultimate destination. At each node you come to, you must now calculate the angle you need to travel along, and the next nearest node that lies near enough along that angle. And so every time we travel from node to node, we can simply log that as whichever road the vector represents, making the first step in the travel instructions. If you didn't quite follow that, don't worry – I go into a bit more depth in the box-out which contains something that looks vaguely like a thistle that hasn't been getting enough Ready-Gro just recently.

No through road

Ah. We've got a problem. What if our route-finding algorithm leads us up a blind alley? This is where the map you draw is very important, as you can only map roads that lead to other roads, preferably with other roads turning off at regular intervals. You'll find, if you look at a road map of Britain, there are absolutely no roads that lead no-where (except, perhaps, the M25). You'll be hard pushed to come to a dead end until you start counting streets – major roads always lead to other major roads.

So what was the point of all this, then?

The point? Simple. Next month, you'll find a demo of *RoutePlanner* on the AA covertape (covering just motorways and major trunk roads). When you use it, you might wonder how it all works (it is a miniature miracle of a program, after all). Well, now you know. If you don't buy next issue, at least you'll have an insight as to how one of the most useful utilities to be written on the CPC actually works. Failing that, you might like to write your own.

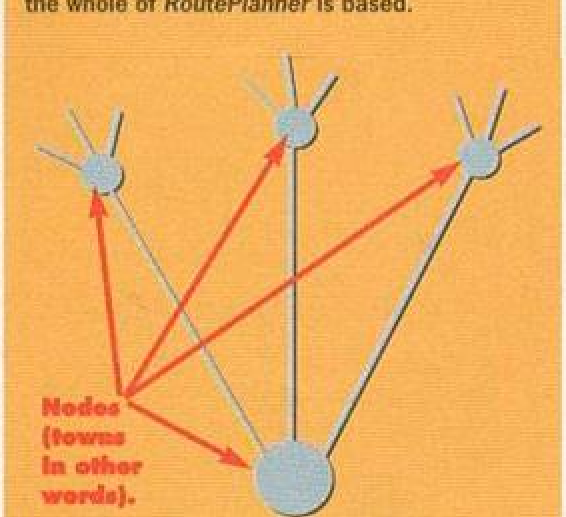
Now that's what I call a novelty serious page. Have fun.

A RUN-THROUGH

Okay. Let's assume for now we want to head to a node at an angle of 20 degrees (roughly NNE). If we take the lower node here as our starting point, we need to find which vector leads off in the closest direction to the one we want. In this case, it's the second node, that leads directly north. It's at this point that we arrive at our second node, and log the journey as a jaunt from Nodeonesville along the A7 (or whatever) to Nodetwotown. That's our first leg of the journey.

Now we're at a new node we need to repeat the algorithm, working out the best angle to travel at to reach our destination. In this case, the closest match is the right-hand vector, taking us very close to our final destination (though that may not necessarily be the case). This second change of node is logged as the *second leg of our journey, in the same way as* the first. If the node we've arrived at is the final destination then the job's done, otherwise we have to go around our loop again, reading from the start of this paragraph.

And, basically, that's the concept on which the whole of *RoutePlanner* is based.



(Don't be fooled – it might look like a failed attempt at drawing a thistle to you and me, but to Simon, this is an explanatory diagram of the theory behind RoutePlanner – Dave.)

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Fluff (PLUS only)	£5.95	£7.95
Ball Bearing	£3.95	£5.95
Justice	£3.45	£4.95

Fluff: Console style platformer utilising "plus" graphics. Given a 90% review in Amstrad Action issue 104.

Ball Bearing: Guide your ball through the maze while avoiding the numerous hazards.

Justice: Graphic adventure "a really good example of what can be done when someone with real imagination sits down to write an adventure" - AA99

PICK YOUR OWN COMPILATION

CHOOSE EITHER 2,4 OR ALL OF THESE GREAT GAMES WHICH WERE FEATURED IN AA99

	TAPE	3.5" DISC	3" DISC
ANY 2	£3·45	£4·45	£4·95
ANY 4	£6·45	£7·45	£7·95
ALL 6	£8·45	£9·45	£9·95

Cloaker - Cloak your 14-strong fleet ready for battle
Manto - Rescue the caved terraformers with 3 craft
TTP - Take part in a game of intergalactic tug-o-war
General X - Promote your 10 units to general status!
Pacifist - Save 3 armies from destroying each other
Sector 5 - You must be 1st to conquer five sectors

WE WANT TO SELL YOUR PRODUCT - SEND US A SAMPLE AND WE'LL OFFER YOU SOME EXCELLENT TERMS

COMMERCIAL

AMSTRAD CPC COMMERCIAL SOFTWARE CASSETTES & COMPILATIONS - FREE GAME - SEE ABOVE

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- Alternative World Games £1.95
- Arcade Hits (2) £3.95
- Arcana (3) £2.95
- ATF - Air Tactical Fighter £2.95
- Barry McGuigan World Championship Boxing £1.95
- Bedlam £1.95
- Best of Elite Vol 1 (4) £4.95
- Best of Elite Vol 2 (4) £4.95
- Both 1 & 2 for only ..... [illegible]
- Beyond the Ice Palace £2.95
- Big 4 Vol 2 (4) £4.95
- Bobsleigh £2.95
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- Circus Games £2.95
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- Continental Circus £2.95
- Dark Force (2) £2.95
- Demons & Drivers (2) £3.95
- Desolator £1.95
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Items in blue are compilations - the number in brackets is the number of games. Items in red are special offers

OUR SOFTWARE RANGE IS EXPANDING RAPIDLY, BY THE TIME YOU READ THIS WE SHOULD HAVE MANY MORE TITLES - SEE OUR PRODUCT GUIDE FOR DETAILS!

WE ARE WILLING TO PURCHASE SURPLUS STOCKS FROM OTHER ORGANISATIONS - CALL US WITH DETAILS

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3.5" Branded	£0.85	£3.95	£6.95	£12.95	£29.95	[illegible]
3.5" Bulk	£0.55	£2.95	£4.95	£9.45	£22.45	[illegible]
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5.25" Bulk	£0.55	£2.45	£3.95	£7.45	£17.45	[illegible]
3" Plastic Cases	£0.65	£2.95	£4.95	£9.45	£22.45	[illegible]
3.5" Plastic Cases	£0.65	£2.95	£4.95	£9.45	£22.45	[illegible]
3"/3.5" Disc Labels		£0.25	£0.40	£0.65	£1.25	[illegible]
5.25" Disc Labels		£0.15	£0.25	£0.45	£0.95	[illegible]

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3.5" Disc Head Cleaner £3.95
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SPECIAL OFFERS

BUY 10 DISCS AND GET A CLEANER FOR ONLY £2.95
BUY 20 DISCS AND GET A CLEANER FOR ONLY £1.95
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BUY 100 DISCS AND GET A FREE DISC STORAGE BOX AND DRIVE CLEANER
NB: Please ask for special offers

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Star LC10/20/100, LX10, NX1000/1020 Amstrad DMP2000/2160/3000/3160/4000
Mono Ribbons - Price Band B: 1 - £2.95 2 - £5.45 5 - £11.95 10 - £21.95
Star LC200 Star LC24-100/200 Citizen 120D/180D/200GX/LSP100 Swift 9/24
Epson LX400/800 LQ400/570/800/870 Seikosha SP1900+/800/1000/1060/2000
Commodore MPS 1200/1250 Fujitsu DL3300/3400 DX2100/2200/2300/2400
Mono Ribbons - Price Band C: 1 - £3.45 2 - £6.45 5 - £13.95 10 - £25.95
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Panasonic KX-P1081/1082/1083/1090/1091/1092/1115/1123/1124/1140/1170/1180
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CPC to PLUS Monitor
PLUS to CPC Monitor
Joystick Splitter
RS232 1-1 25 pin
ONLY £7.95 EACH

CPC H/W TO PLUS - £14.95

PRINTING

1 for £6.45 2 for £11.95 3 for £16.95 all 4 for £20.95
CPC to Printer Lead
Universal Printer Stand
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Printer Dust Cover

PAPER/LABELS

	x100	X500	X1000	X2000	X4000
11" x 9.5" Listing Paper	£1.95	£6.95	£10.45	£17.95	£29.95
Exact A4 Listing Paper	£2.45	£8.45	£12.95	£24.95	£41.95
3.5" x 1.5" Address Labels	£1.45	£5.45	£7.95	£12.95	£19.95
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* Available in the blue, red, yellow & green - or assorted
Also Available - Copier Paper, Envelopes, Parchment Paper etc

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